

Recommended by the  
BRITISH COLLEGE OF PHYSICAL EDUCATION.

---

THE  
MANUAL OF DRILL  
AND  
PHYSICAL EXERCISES,  
WITH OR WITHOUT DUMB-BELLS  
OR MUSIC.

---

REVISED EDITION.

---

BY  
THOMAS CHESTERTON,  
ORGANIZING TEACHER OF PHYSICAL EDUCATION  
TO THE LONDON SCHOOL BOARD.

---

ILLUSTRATED FROM PHOTOGRAPHS.

---

THREE SHILLINGS (Nett).

5.00

ML


CHESTER ON



22101755775

Med  
K8878

Edgar F. C. Wright



Digitized by the Internet Archive  
in 2016

<https://archive.org/details/b28079061>

MANUAL OF DRILL  
AND  
PHYSICAL EXERCISES.

1. The first part of the document is a list of names and addresses of the members of the committee.

# MANUAL OF DRILL AND PHYSICAL EXERCISES

WITH OR WITHOUT DUMB BELLS OR MUSIC,

FOR THE USE OF TEACHERS AND INSTRUCTORS OF PHYSICAL EXERCISES.  
STUDENTS IN TRAINING COLLEGES, &C., AS TAUGHT IN THE LONDON  
AND OTHER BOARD SCHOOLS, ALL ARMY SCHOOLS, PRINCIPAL PUBLIC  
SCHOOLS, CIVIL GYMNASIA, POLYTECHNIC INSTITUTIONS, AND  
EVENING CLASSES THROUGHOUT THE COUNTRY.

---

COMPILED AND ARRANGED FROM THE BEST AUTHORITIES

BY

THOMAS CHESTERTON,

*Organizing Teacher of Physical Education to the School Board for London.*

LATE CHIEF INSTRUCTOR AT THE ALDERSHOT GYMNASIUM.

*Holder of Gold Medals as First Prize Winner in Practical Gymnastic Competitions Open to the British Army in 1876, '77, '78, & '81.*

Holder of First-Class (Advanced) Certificates for Physiology and Hygiene from the Science Department, South Kensington.

AWARDED MEDAL BY THE COMMITTEE OF THE ROYAL CENTRAL GYMNASIUM OF STOCKHOLM, 1882 & 1890.

*Founder of the British College of Physical Education.*

---

ILLUSTRATED FROM PHOTOGRAPHS.

---

REVISED EDITION.

*With an Introduction by CHARLES ROBERTS, F.R.C.S.*

---

LONDON: GALE & POLDEN, LTD.,

2, AMEN CORNER, PATERNOSTER ROW, E.C.,

AND

WELLINGTON WORKS, ALDERSHOT.

---

THREE SHILLINGS.

Post Free to any part of the World.

PRINTED BY GALE & POLDEN, LTD., 2, AMEN CORNER, LONDON, E.C.,  
AND  
WELLINGTON WORKS, ALDERSHOT.

—  
1900.

WELLCOME INSTITUTE LIBRARY	
Coll.	we110mec
Call	
No.	QT



BY THE AUTHORITY

OF

FIELD-MARSHAL THE RIGHT HON. VISCOUNT  
WOLSELEY, K.P., G.C.B., G.C.M.G., Command-  
ing-in-Chief, extracts from the system of DRILL  
and PHYSICAL Exercises taught to the whole  
of the British Army, Navy, Auxiliary Forces,  
and Native Indian Army have been incorporated  
in this work.



## PREFACE.

---

Numerous works have been produced of late years on the subject of Physical Education, most of which—particularly those of foreign origin—advocate the introduction of one system to the exclusion of all others. This manual has no such pretensions. It simply contains a carefully selected course of exercises, which the author has compiled after a thorough study and testing of the various systems practised both at home and abroad. This course of exercises has been approved and adopted by the highest civil and military authorities in this country for the physical training of both young and adults.

The exercises are arranged in the simplest form with a view to facilitate their application, *especially to the young*, in the most entertaining manner possible. All complicated movements, or those that might appear ridiculous to the eye, are carefully excluded.

Each movement is explained as briefly and clearly as possible, with the object of securing strict uniformity in teaching; *and nothing is introduced which is impossible to be taught to an average class of school children in a playground, whilst dressed in their ordinary clothing.*

The book is divided into six parts. The first can be used preparatively to, or independently of, the second, and contains only such Drill as is necessary as a preliminary to that part, which consists of Physical Exercises. The third consists of exercises when on the march. The fourth contains directions and suggestions for figure marching, etc. The fifth consists of those preliminary positions which aid in securing the correct movement of the limbs preparatory to a swimming lesson; while the sixth gives the requisite amount of desk and slate drill in class-rooms provided with dual desks.

Each exercise is designed to give special employment to certain parts of the body; but no attempt has been made to introduce any of them in a *medical sense*, as no rules can be definitely laid down for such a course. This can only be done in accordance with the special requirements and capacity of the individual,

suitable movements being introduced and varied according to circumstances, and the effects carefully observed from day to day. This last point is strictly essential, as movements, which may be performed with little exertion by one person, may be decidedly violent and injurious to another.

Each group, and, in a great measure, each exercise, lead to those in advance of it, so that every effort is not only beneficial to the pupils, but assists them in performing the movements which are required for the perfect execution of those more advanced. This must be clearly understood by the teacher and observed by him as the fundamental principle of the system.

All the exercises, either singly or as combinations (unless where specially mentioned) may, without alteration, be practised with dumb-bells, and to music. In every case where practical, numbers are substituted for the explanatory words of command, in order that useless repetition of the latter may, as a class becomes efficient, be avoided.

With a view to making this work as complete as possible, a few rules are inserted for the guidance of the teacher when conducting the lesson, preceded by an introductory article on the nature and objects of Physical Education, kindly written for this work by C. Roberts, Esq., F.R.C.S.

The groups of exercises are followed by foot-notes pointing out, as briefly as possible, the chief parts of the body employed in their execution. A table of Drill and Physical Exercises for each standard and suitable exercises for class-rooms have been added.

The whole is profusely illustrated from *photographs* showing the various principal positions ; and suitable music is added to accompany the combined practices.

T. CHESTERTON.

London,  
January, 1892.

---

## PREFACE TO THE REVISED EDITION.

---

Since the publication of the first edition of this work in 1891, the author has personally conducted the training of upwards of 2,000 Head and Assistant Teachers, to enable them to give instruction in the system throughout the Metropolis. The whole of these are now teaching the exercises to the children attending the Board Schools in London. The Voluntary School Teachers have also heartily taken up the subject, and have received their instruction in a similar manner; while the Glasgow and other School Boards have adopted this system throughout their schools. The authorities of many Training Colleges for Teachers, viz.:—Battersea, Borough Road, Bangor, Carmarthen, Chelsea, Culham, Hammersmith, and Westminster have adopted this system exclusively; and all the students under training at these institutions are instructed during residence, either by the author or by persons who have attended his training classes.

The Military Authorities adopted this manual, in 1891, for use in all Army Schools, at home and abroad, and a special edition has been published this year for the "Public Service."

All Army School Teachers, on taking up their appointments, are expected to qualify themselves to give instruction thoroughly and successfully according to the manual. As this has been strictly complied with during the past eight years, it is evident that the system is now being taught in all parts of the world.

Parts I. and II. (Drill and Physical Exercises) will be found to contain one of the most simple, yet beneficial, methods of Physical Training for school children that can possibly be devised; and to this fact its great popularity among the School Teachers and Instructors of Physical Education throughout the country must be chiefly attributed.

The Education Department has made Physical Culture a compulsory subject in all schools; and this is undoubtedly a step in the right direction. This Manual of Drill and Physical Exercises completely satisfies all the Government requirements.

*August, 1899.*

T. CHESTERTON.



# CONTENTS.

## INTRODUCTION.

Nature and objects of Physical Education by C. Roberts, F.R.C.S. ...	PAGE 15
--	------------

RULES FOR CONDUCTING THE LESSON ... ..	23
--	----

## PART I.—PRELIMINARY FORMATIONS AND DRILL.

SEC.					
1—Formation of a Class in one rank	...	...	...	...	27
2—Attention	...	...	...	...	27
3—Dressing a class with intervals...	...	...	...	...	29
4—Standing at ease	...	...	...	...	30
5—Turnings	...	...	...	...	32
6—Forming and sizing a class in two ranks	...	...	...	...	36
7—Dressing a class in two ranks	...	...	...	...	38
8—Balance step	...	...	...	...	40
9—Marching—Length of pace and cadence	...	...	...	...	41
10—Position in marching	...	...	...	...	41
11—Slow and quick march	...	...	...	...	42
12—Marking time	...	...	...	...	43
13—Side or closing step	...	...	...	...	43
14—Changing step	...	...	...	...	44
15—Double march or running	...	...	...	...	44
16—Turning when on the march	...	...	...	...	45
17—Marching in file	...	...	...	...	46
18—Wheeling in file	...	...	...	...	49
19—Opening and closing ranks	...	...	...	...	49
20—Dismissing	...	...	...	...	54

## PART II.—PHYSICAL EXERCISES.

COMMENCING POSITIONS—	
Positions of the upper limbs ... ..	55
“     “     lower     “     ... ..	57
HEAD MOVEMENTS—	
“     Sideways bending ... ..	64
“     Forwards and backwards bending ... ..	64
“     Turning ... ..	64
ARMS RAISING AND SWINGING—	
“     Sideways raising ... ..	65
“     Forwards and backwards raising ... ..	65
“     Sideways raising and forwards swinging ... ..	66
“     Sideways and upwards raising ... ..	66
“     Circling ... ..	66
“     Swinging ... ..	68

<b>ARMS BENDING AND STRETCHING—</b>		<b>PAGE</b>
"	Outwards, upwards, and downwards stretching ...	69
"	Simultaneous, upwards and downwards stretching ...	71
"	" " outwards " ...	71
<b>TRUNK MOVEMENTS—</b>		
"	Sideways bending ...	74
"	Forwards and backwards bending ...	74
"	Turning ...	75
<b>TRUNK AND ARM MOVEMENTS—</b>		
	With trunk sideways bending ...	77
"	" turning ...	77
"	" forwards and backwards bending ...	78
"	" turning and foot movements ...	78
	Music for the above practices as a combination ...	83
<b>LEG AND HIP MOVEMENTS—</b>		
	Knees bending and stretching ...	85
	Bending and stretching one knee ...	85
	Astride leaping ...	87
<b>LEG, HIP, AND ARM MOVEMENTS—</b>		
	Knees bending with arms sideways raising ...	89
"	" " " lowering ...	91
"	" " " and upwards raising... ..	91
<b>LUNGING—</b>		
	Side lunging ...	92
	Direct lunging from the engage ...	94
"	" " in one movement ...	95
<b>SIDE LUNGING WITH ARM MOVEMENTS—</b>		
	With arms sideways raising ...	97
"	" " lowering ...	99
"	" " stretching ...	99
"	" " sideways raising and trunk bending ...	99
<b>DIRECT LUNGING WITH ARM MOVEMENTS—</b>		
	With oblique arms stretching ...	101
"	" trunk and arm movements ...	103
	Music for the second practice as a combination ...	107
<b>BALANCE MOVEMENTS—</b>		
	Leg sideways raising ...	108
"	" forwards and backwards swinging ...	108
	Circular swinging ...	110
	Knee raising with foot movement and leg stretching ...	110
<b>SHOULDER MOVEMENTS—</b>		
	Flexion and extension of the arms sideways ...	113
"	" " forwards and backwards ...	113
	Alternate flexion and extension of the arms on the lunge ...	113
	Simultaneous " " ...	114
	Alternate flexion and extension of the arms " with head turning ...	119
	Arms raising with foot movements ...	119
"	" bending and swinging with foot movements ...	121
"	" striking with foot movements ...	121
	Music for the first four practices as a combination ...	117



SHOULDER MOVEMENTS WITH DIRECT LUNGING—	PAGE
With arms extended ... ..	124
"     striking ... ..	125
Music for the first or second practice as a combination ...	127
GENERAL COMBINED PRACTICE ... ..	128
EXERCISES WHICH CAN BE DONE IN THE CLASS-ROOMS BETWEEN THE DESKS ... ..	129

## PART III.

EXERCISES WHEN ON THE MARCH—	
Marching with arm movements ... ..	132
"     in quick time with heels raising ... ..	132
"     "     "     knees     "     ... ..	132
Alternate step and hop march ... ..	133
Marching in double time with knees raising ... ..	135
"     and exercises alternated ... ..	136

## PART IV.

MARCHING IN VARIOUS FORMATIONS, AND FIGURE MARCHING ...	137
---	-----

## PART V.

SWIMMING DRILL—	
Arm movements ... ..	143
Leg     "     ... ..	145
Arm and leg movements combined ... ..	147

## PART VI.

DESK AND SLATE DRILL ... ..	150
-----------------------------	-----

---

GRADUATED TABLE OF DRILL AND PHYSICAL EXERCISES FOR EACH STANDARD IN AN ELEMENTARY SCHOOL ... ..	154
---	-----



## INTRODUCTION

---

THE Physical Instructor should endeavour to form a clear idea in his own mind of the objects, methods, and application of physical exercises, and not be content with their routine performance.

The *objects* of the physical education of children are health, all-round bodily development and growth, discipline, and recreation; and for adults, in addition to these, the development of muscular strength and dexterity.

The *means* for attaining these objects are play, drill, swimming, gymnastics, and athletic games and sports; and the *application* of these exercises to the varying conditions of age, sex, and physique constitutes the science and art of Physical Education.

*Health* consists in the due performance of all the functions of the body—nutrition, secretion, the generation of animal heat, motion, feeling, thinking, willing, &c. These various functions are developed and controlled by the senses and the muscles.

*All-round development* of the body depends on the physiological law that “the structures and functions of the body increase with use and waste with disuse or idleness.” This law lies at the bottom of all kinds of education, and just as the school teacher develops and trains the mind by the use of the senses, so the physical instructor develops the body by the use of the muscles.

*Discipline* is the reduction of all the functions of the body, but more especially those of the nervous system, to rule or habit, by which obedience to the will and prompt and vigorous actions are produced. *Recreation* is the reverse of discipline; it is the liberation of the animal functions from restraint, and their diversion into new channels.

Although the exercises of the senses are of a physical nature, and should receive due attention from the physical instructor, he is chiefly concerned with the muscular structures, forming, with the bones of the skeleton, the trunk and limbs of the body.

*The skeleton* is the framework on which all the other structures rest, and its various segments form the joints which allow of the movement of one part on another. The individual bones are flat or round, long or short, thick or thin, according to the work they have to do, or the organs they have to protect; their true forms and their relations to each other can only be learned by an examination of the skeleton.

There are two kinds of *muscular tissues*, which differ from each other in structure, distribution and function. They are described as *voluntary*, or those which are under the control of the will, and *involuntary*, or those which act independently of the will. The voluntary muscles constitute nearly the whole of the fleshy parts of the body. They are for the most part flat or long spindle-shaped bodies, having fibrous tendons at each end, by which they are attached to the bones of the skeleton, and their chief functions are to support the body in the erect position, to bend the joints, and move the whole body from place to place. Their primary use in the animal economy is to procure food and to protect the body from injury. The involuntary muscles enter into the structure, and control the movements of the internal organs. They carry on the functions of the circulation of the blood, the respiration, digestion, and secretion, and their primary uses in the animal economy is to secure the nutrition and growth of the body. The voluntary system of muscles is the one with which the physical instructor is chiefly concerned, but the involuntary system is also of interest to him, as it is indirectly under the influence of the voluntary system, especially in the two important functions of the circulation and the respiration.

The voluntary muscles are arranged in two great divisions which are antagonistic, or opposed to each other. On the front of the trunk and limbs are placed the *flexor*, or bending, or doubling-up muscles, and behind the body and limbs are placed the *extensor*, or straightening or opening-out muscles. There are a few muscles on the outer sides of the limbs which are called *abductors*, whose functions are to raise or open out the limbs, but they are practically extensor muscles and may therefore be included in that large group; and there are also a few muscles on the inside of the limbs which are called *adductors*, which close in the limbs to the trunk or each other, but are practically flexors and may be included with the flexor group. Thus, when the body is standing

erect with the palms of the hands forward, the muscles on the front and inner side of the trunk and limbs down to the knees are flexors, while those on the back and outer side of the trunk and limbs are extensors. Below the knees this order is reversed.

There is a remarkable fact connected with this disposition of the muscles into two large divisions of flexors and extensors which is of the first importance to the physical instructor, namely, that from birth the flexor muscles possess a higher tone and are stronger and more tense than the extensors and predominate over them. At birth a child is able to support its own weight by the grasp of the flexor muscle of the hands and arms, while it hardly possesses the power to straighten its fingers or limbs by the use of the extensors. This greater tonicity or rigidity of the flexors continues through life, and is the cause of the curling of the body and limbs in children when at rest or asleep, the slouching round-shouldered gait of untrained boys and girls, and the bent attitude of old people. Moreover, most of the physical occupations of civilized life favour the assumption of vicious attitudes of the body from the predominance of the flexor muscles, which by doubling it up, narrow the chest, obstruct the circulation, and press on the organs of digestion. Hence the first and most important duty of the physical instructor is to exercise and strengthen the extensor or opening-out muscles, and thereby counteract the natural and acquired tendencies to the doubling-up of the fingers on the hands, the sections of the limbs on each other, the limbs on the trunk, the head on the chest, and the whole body on itself. It is also important for him to bear in mind that the proper training for this object is the reverse of that which produces the strength of grasp which is developed by exercises on fixed gymnastic apparatus. He must also remember that, in consequence of this constitutional difference of flexors and extensors, fatigue is felt earlier in the extensor than in the flexor muscles, and is recognised by pains in the back, shoulders, &c. All precision and skill of muscular action is the result of the simultaneous cultivation of opposing muscles, while clumsiness of all kinds is the result of the predominance of one system over the other; hence, for children, the methods of training which produce a flexible and graceful carriage of the body and limbs are better than those which develop mere strength, a jerky action of the muscles, or great acrobatic skill. Free exercises, and exercises with light movable apparatus (such as is

mentioned in this work), together with walking and running are more suitable for this purpose than exercises on fixed apparatus, in which the weight of the whole body is thrown on the arms, which, under the age of fourteen, at least, are too feeble to maintain it.

Besides the front and back division of the muscular system just referred to, there is a lateral division of the whole muscular system, which gives rise to *right and left-handedness*. This condition is due at bottom to the nervous system, but it is one which requires the special attention of the physical instructor, as it is often the cause of bodily deformity in children. The weaker side, which in the great majority of children is the left, requires more careful and persistent training than the stronger, in order that the balance of the body may be secured. This is more necessary in right-handed than left-handed children, as many social customs, such as shaking hands, and school occupations, such as writing and drawing, compel left-handed children to be to a great extent ambidextrous. Exercises which give separate work for each hand are better for this purpose than those in which both hands are engaged together; hence movable apparatus is more appropriate than fixed apparatus, as work which is apparently performed by both is chiefly performed by the stronger hand. The test of good physical teaching is to be found in the skilful use of the extensor muscles and of the weaker hand, that is to say, in the erect, graceful carriage, and the ambidexterity of the pupil.

Although this manual does not deal with the use of fixed gymnastic apparatus, the young physical instructor must be warned against the too early change from the use of "movable" gymnastic apparatus, such as dumb-bells, bar-bells, and clubs, which are wielded by the hands and weigh only a few pounds, to exercises on "fixed" apparatus like parallel and horizontal bars, which throw the whole weight of the body, weighing as many stones, on the upper limbs. The bones are not sufficiently consolidated, and the muscles are incapable of developing sufficient size and strength for such exercises before the age of fourteen, and then only to a limited extent; consequently the too early use of fixed apparatus may, and indeed often does, cause physical deformity, heart strain, and nervous prostration, when the opposite results have been confidently expected. The instructor must not allow himself to be misled in this respect by the early display of



grasping power in children, as this is due, as has been pointed out in the text, to a congenital peculiarity of the flexor system of muscles, and which is no guide to the general physical powers of a child.

When the muscles are examined in detail they are found to be arranged in large or small groups, and in very few instances can a muscle be made to act independently ; and it is not desirable, if it were possible, to differentiate the various segments of a group (to which anatomists have given names chiefly for medical and surgical purposes) and train each of them separately. The complete actions of some muscles are imperfectly known even to anatomists, and if they were known it would be impossible to devise exercises which would apportion to each one the exact amount of training it should receive ; hence all the methods of physical education which claim to do this are undeserving of serious attention.

Very free flexion, extension, and rotatory movements are necessary for the proper use of the shoulder joint, and consequently, we find it surrounded by a large and complicated group of muscles which support and strengthen it, as well as produce the proper movements. There are still larger and more powerful groups of muscles surrounding the hip-joints which move the lower limbs on the trunk, the trunk on the limbs, and maintain the trunk on the lower limbs in the erect attitude. The smaller joints, such as the elbow, wrist, knee and ankle, which have a narrower range of movement, are supported and moved by the tendons of muscles attached to the bones above and below them. The spine and the organs attached to it in front is supported, and its slightly movable joints moved, by a large fibrous and muscular structure covering it behind ; while the head, with its wide range of movements, is controlled by a series of muscles in the neck, some of which have other functions to perform than the rotation and bowing of the head. In all cases it is general and not special muscular development which is to be aimed at by the physical instructor. The maintenance of the body in a graceful, erect attitude, the free use of the joints in all directions which these bony structures permit, the equal use of the limbs on both sides of the body, and the mutual and regulating action of the flexors and extensors on each other, are the objects to be secured in training the muscles, and not the detailed training of separate muscles, or the acquisition of strength or of skill in the performance of gymnastic exercises. It

cannot be too strongly impressed on the mind of the young physical instructor that gymnastics are a means and not an end. Children are taught gymnastic exercises not that they may perform them well and produce a pretty exhibition, but that their health and all-round bodily development may be promoted.

In addition to producing motion the muscles have other important functions to perform. They promote the circulation of the blood by calling for an increased supply when in action, and they press on the blood vessels passing among them thus sending the blood more quickly to the heart and lungs. In this way muscular exercise promotes the nutrition, secretion, waste, and reconstruction of all the tissues of the body. The maintenance of the temperature of the body at 98° Fahr., without which life is impossible, is due to the influence of muscles on the blood and oxygen which are brought into contact with them, and this function is well or ill-performed as the muscles are well or ill-developed.

The necessity for good ventilation, in connection with physical exercise, cannot be exaggerated. Muscular action, and the quickening of the circulation of the blood to which it gives rise, are the chief agents in the disintegration of old, and the formation of new tissues, as well as the generation of animal heat which results from these changes. The waste products of muscular action, of which carbonic acid is the most important, are highly poisonous to the organism, and especially to the nervous system, as we see in the production of fatigue, drowsiness, and headaches from physical overwork and bad ventilation, and it is obvious that to carry on active physical work in an impure and dust-contaminated atmosphere must not only retard the exertion but add to the poisonous constituents of the blood, and produce more harm than good. It is most important, therefore, that schoolrooms and gymnasia should be well ventilated, and that very active exercises, like running, should be carried on in the open air.

The voluntary muscles are intimately connected with, and dependent on, the nervous system; indeed, they are the instruments or tools of the brain and spinal cord, and when we train muscles to perform automatic actions we are at bottom training the nerve centres with which they are connected. This is one of the most important results of physical education, as it is in this way that discipline and good habits are acquired. It is desirable on the other hand to keep this in mind in selecting exercises



for school children who are being trained intellectually by the schoolmaster or schoolmistress. Difficult and complicated exercises which call for excessive attention should be avoided, and simple recreative exercises or play adopted. Running and free gymnastic exercises are the type of this class of exercises, while exercises dependent on counting successive steps, or watching their performance by the instructor, should be avoided as affording little physical benefit and less recreation, and producing further nervous strain.

The order in which the nerve centres are developed and the corresponding order in the muscular development should also be observed in the selection of exercises for children. In young children the muscles of the trunk are first developed; next those which attach the limbs to the trunk at the shoulders and hips; next those of the larger joints of arms and legs; and last of all those of the hands and feet.

The muscular control of the fingers is not complete till near the end of ordinary school life (13 or 14 years); hence much time and effort is wasted in teaching young children to write, sew, and to play musical instruments before their nerve centres and muscles are sufficiently advanced to enable them to overcome the technical difficulties. The same remark applies to complicated gymnastic exercises and all the forms of technical education which involve the use of the hands and fingers.

Periodicity, or the alternation of work and rest, is a fundamental law of physical development. Work, both mental and physical, must be followed by rest. The rest of the muscles is relaxation, and of the nervous system, sleep. The flexor muscles, from their greater tonicity, claim the greater share of rest; hence children tuck up their arms and legs, and roll themselves into a ball when at rest or asleep—a position which is most easily assumed sitting or lying down on the side. The maintenance of the erect attitude and sitting still are very irksome to young children, and should be avoided as much as possible. A simple rule to observe under all conditions of exercise is, that the period of rest should equal the period of work, and the younger the child the shorter should the periods be.

Children who are imperfectly nourished, either from want of food or from disease, should not be subjected to active physical work, as the result will be a wasting, without a corresponding renewal, of the existing tissues; and only sufficient exercise to maintain the

temperature of the body, which should be supplemented by warm clothing, should be required of them.

Exercises should be adapted to the age, sex, and physical constitution of children. Below the age of fourteen years there need be no distinction on behalf of the sexes. Under the age of seven years little more than games and free exercises without apparatus are required. From seven to ten, when the large and small joints of the arms and legs are coming into use, free exercises of a varied kind may be adopted, together with games in which running forms a chief feature. After ten years of age the usual courses of free movements, with the gradual introduction of light movable apparatus, such as dumb-bells, bar-bells, and clubs may be adopted, and these with marching and games are sufficient for children of both sexes, up to the age of thirteen or fourteen years. It is not till after these ages that the muscular strength and dexterity become of importance from an educational and practical point of view, and when the time arrives for the use of fixed apparatus and the higher forms of gymnastics, games, and sports.

The exercises described in this work are intended for children under the age of fourteen years, but the physical instructor who wishes to carry them out to the best advantage to the pupils, and to his own credit as a teacher, should make himself acquainted with games and exercises which his pupils may have learned in the infant school, and also with the training they should receive in the gymnasium and playing field after leaving his hands. There ought to be the same continuity in the physical as in the mental education of children, and to understand this the physical instructor should make himself familiar with the whole course of physical education from infancy to manhood.

CHARLES ROBERTS.

*London, 1892.*

---

# MANUAL OF DRILL

AND

## PHYSICAL EXERCISES.



### RULES FOR CONDUCTING THE LESSONS.

---

The words in the margin are the commands to be given by the Teacher, who must pronounce them distinctly and sufficiently loud to be heard by all concerned.

Every command that consists of one word must be preceded by a caution. The caution, or the cautionary part of a command, must be given slowly and distinctly; the last, or executive part, which should consist of only one word or syllable, must be given sharply and quickly, as "CLASS—HALT," "RIGHT—TURN," "ARMS UPWARDS—BEND." A pause of slow time must invariably be made between the caution and the executive word. This rule must be strictly observed throughout, for therein lies the secret of success in the teaching of drill and physical exercises.

Numbers in brackets indicate that they may be substituted for the words of command. When it is intended to use numbers instead of words of command, the further caution "By Numbers" should invariably follow the explanatory caution, *e.g.*, "Arms sideways and upwards raising, by numbers."

The words of command or numbers in the Physical Exercises must be given sharply, or slowly and smoothly, as the nature of the movements may require.

When, owing to inaccuracy in executing a movement, or a lack of promptness in obeying the directions of the Teacher, a class or

pupil is required to resume the previous position, the command "As you were" should be given.

If it is desired to perform an exercise several times in order to ensure accuracy of execution, etc., the repetition of words of command may be obviated by the use of the command "REPEAT."

Should it be necessary to correct the position of anyone during the practices, the command "STEADY" should be given, when the pupils will remain stationary in whatever position they may be at the time. This applies to the whole of the Physical Exercises. Corrections should be made as far as possible by *calling attention* to the errors, and only on this failing is the pupil to be *placed* in the correct position by the Teacher.

As the benefits derivable from Physical Exercises depend chiefly upon the manner of their performance, it is essential that every movement, whether slow or quick, should be performed in a *correct and thorough* manner. The Teacher should endeavour to make each lesson as pleasant as possible, only exercising as much control as is necessary to maintain order.

By so doing the pupils will take a lively interest in the exercises, the time will pass agreeably and pleasantly, each muscular movement will be associated with a purpose, and thus a stimulus and zest will be given to the whole performance; consequently the Teacher and pupils will not become wearied by the monotony of the subject, while the greatest possible results will be obtained.

For any exercise to be really beneficial, it is necessary that it should be taken *in the open air*. The great advantages of outdoor exercise are, that it increases the appetite, and ensures the inhalation of the purest air obtainable.

The course is a progressive one, commencing with the simplest exercises. Teachers are not required to follow the course as laid down, but may select movements from each group to meet the requirements of their pupils.

On commencing a lesson, those exercises which require least effort should be taken first, followed by those requiring greater exertion. This method should be reversed when the lesson draws to a close.

If *children* are being taught, each standard must be strictly confined to the portion of Drill and Exercises assigned to it in the syllabus.

No general rule can be laid down as to the duration of the lesson. An amount of exertion which could easily be borne by some pupils might induce fatigue in others. It is advisable to conclude the lesson before there is any indication of fatigue on the part of the pupils, and thus remove the danger of producing ill effects.

Exercise in class-rooms should consist chiefly of trunk and arm movements. As little foot movement as possible should be allowed, and foot stamping should on no account be permitted, owing to the danger of circulating the dust charged with injurious particles from the skin and clothing of the pupils, and the consequent danger of spreading infectious diseases.

If dumb bells are introduced in day schools, it is advisable to confine their use to the higher standards. On no account should any exercises be performed with them until the pupils are thoroughly capable of performing the various movements by word of command. When such proficiency is attained dumb-bells may be used, and the work apportioned to the pupils according to their strength. By so doing the exercises will be varied, resistance to effort will be experienced, more physical exertion will be required to execute the movements, and consequently they will prove more beneficial.

Dumb-bells should vary in weight from 10 to 12 ounces for girls, and from 12 to 16 ounces for boys, and should be made of hard wood, not only to ensure strength and durability, but also to lessen the bulk; the ends rounded, the length ranging from  $6\frac{1}{2}$  to 7 inches; the handles being from  $3\frac{1}{2}$  to  $3\frac{3}{4}$  inches in length, and bulging from  $\frac{3}{4}$  of an inch to 1 inch in the centre, so as to fit into the hollow of the hand. Without dumb-bells the pupils will have nothing in prospect beyond the attainment of precision in executing, what may appear to them, a lifeless, and, in many instances, an effortless system of exercises, devoid of any element which would make them interesting or entertaining.

If suitable music is introduced—whether dumb-bells are used or not—the work becomes more agreeable, the brain is comparatively at rest, an orderly and exact rhythm of movement is

secured for any number of pupils, continual repetition of words of command is avoided, while the ear becomes trained to a recognition of time and tune.

When instrumental musical accompaniment is not available, one portion of the class may perform the movements while the other accompanies them with vocal music, which must be in rhythm with the exercise; or the whole class may work together, counting the time audibly.

Exercise should be of frequent occurrence; otherwise the benefits, derived from the increased action induced by a previous lesson, will have subsided long before the succeeding exercise is begun. The body and limbs should have the widest and freest range of motion, whereby an equable circulation of the blood is most perfectly secured, which is the physiological purpose of all exercise.

Slovenliness, in both attitude and word of command, should be strictly avoided; and it should be borne in mind that a class of children or adults will learn movements more quickly by seeing them performed than by merely hearing them explained.

All defects in the Teacher are generally traceable in the pupil, and in the Teacher's manner of imparting instruction lies the power of securing the attention and proficiency of the pupil.

---



## PART I.

# PRELIMINARY FORMATIONS AND DRILL.

---

### S. 1.—FORMATION OF A CLASS IN ONE RANK.

---

CAUTION.—*In one rank.*

**Fall—In.** The right hand pupil being first placed, the remainder will fall in one after the other, in line with and lightly touching the one on their right, the tallest on the right, shortest on the left, standing at ease. (S. 4.) (Plate 1).

Not more than thirty children should be so assembled in single rank. Should the class consist of a large number of pupils, they should “Fall in” in two lines, three yards apart, and each line or rank should represent a distinct class when numbering, etc. All should work simultaneously on the subsequent words of command.

### S. 2.—ATTENTION.

---

**Class—**  
**Attention.** On the command “Attention,” close the heels by bringing the right foot to the left, and drop the hands to the sides, the elbows slightly turned outwards, the thick part of the arm below the elbow lightly touching that of the pupil next on the right and left, the knees must be straight, the toes turned out at an angle of 60 degrees; the arms hanging easily from the shoulders, the hands slightly flexed, with the thumbs to the front and close to the fore-

Plate 1.

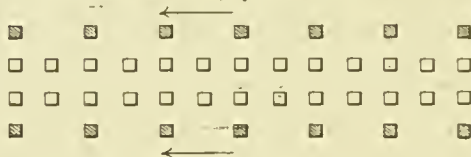
# FORMATIONS AND WHEELING.



CLASS IN SINGLE RANK. ODD NUMBERS ONE PACE FORWARDS, EVEN NUMBERS ONE PACE STEP BACKWARDS - MARCH.



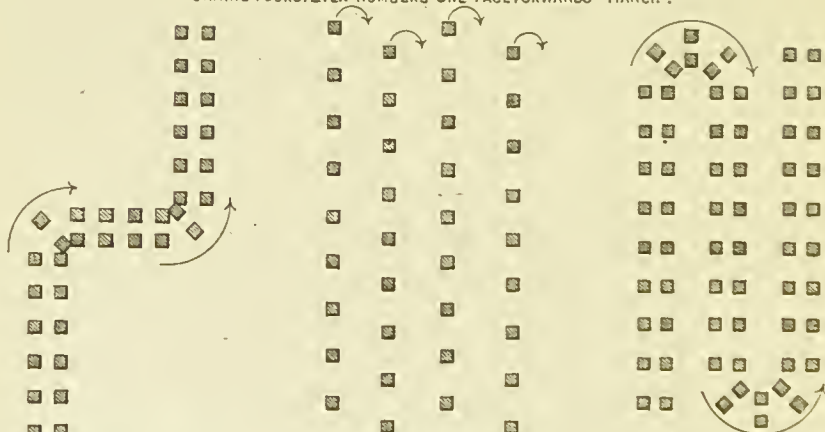
FORM COMPANY, QUICK-MARCH.



FORMING FOURS. ODD NUMBERS ONE PACE OUTWARDS - MARCH



FORMING FOURS. EVEN NUMBERS ONE PACE FORWARDS - MARCH.



MARCHING IN FILE.  
RIGHT & LEFT - WHEEL.

CLASS IN FOUR RANKS, MARCHING.  
RANKS RIGHT ABOUT - WHEEL.

MARCHING IN FILE.  
RIGHT ABOUT & LEFT ABOUT - WHEEL.



fingers, the fingers lightly touching the thigh; the hips slightly drawn back; the chest advanced without constraint; the body straight and inclined forwards, the weight being principally on the fore part of the feet; the head erect, with the chin slightly drawn in; the shoulders square; and the eyes directed straight to the front. (Fig. 1).

### S. 3.—DRESSING A CLASS WITH INTERVALS.

---

**Number.** The class will be ordered to number from the right consecutively, or in twos.

**Odd numbers** Two lines will be formed, the odd numbers taking one pace a pace to the front, and the even numbers a pace to forwards, the rear. The pace is to be taken in both instances even numbers one pace by the left foot followed by the right. (Plate 1).

**backwards—** To re-form single rank, the odd numbers will step backwards, and the even numbers forwards, starting with the left foot as directed above.

In all subsequent drill, children should never be required to take more than three paces backwards. The number of paces should always be stated in the cautionary part of the command.

**Eyes—Right** The eyes will be directed to the right, the head being turned slightly in that direction, the body kept square to the front.

**Dress.** The pupils, except the right-hand one, will extend the right arm, palm of the hand upwards, points of the fingers touching the left shoulder of the pupil next on the right, and take up their dressing by advancing or retiring with short quick steps, till they can see the lower part of the face of the second pupil beyond them, keeping the body and head erect, and shoulders square to the front.

**Eyes—Front** Turn the head and eyes sharply to the front, and drop the arm smartly and quietly to the side. Dressing from the left can be done in like manner, raising the left arm.

The above is the simplest way in which a class can be opened out for instruction in the necessary preliminary positions and drill prior to commencing Physical Exercises, viz, "Attention," "Standing at ease," "Turnings," "Balance step," etc.

Most of the physical exercises also can be done by a class in this formation if previously turned "Half right" or "Half left," but it is advisable to retain the class at its original front, or turned right or left, as drilling when at the half-turn is confusing to children.

#### S. 4.—STANDING AT EASE.

---

CAUTION.—*Stand at ease, by numbers.*

One. On the word "One," straighten the fingers, raise the forearms, left hand in front of the centre of the body as high as the waist, palm upwards; the right hand as high as the right breast, palm to the left front; both thumbs separated from the fingers, and the elbows close to the sides.

Two. On the word "Two," strike the palm of the right hand on that of the left, keeping the elbows close to the sides, and the fingers straight. Drop the arms to their full extent, keeping the hands together, and, as they fall, pass the right hand over the back of the left; at the same time draw back the right foot six inches, and slightly bend the left knee—the arms must hang loosely and easily, the fingers pointing towards the ground, the right thumb lightly held between the thumb and palm of the left hand: the body must incline forward, the weight being on the right leg, and the whole attitude without constraint. (Fig. 2.)

When children "Fall in" they should do so in the position above described.

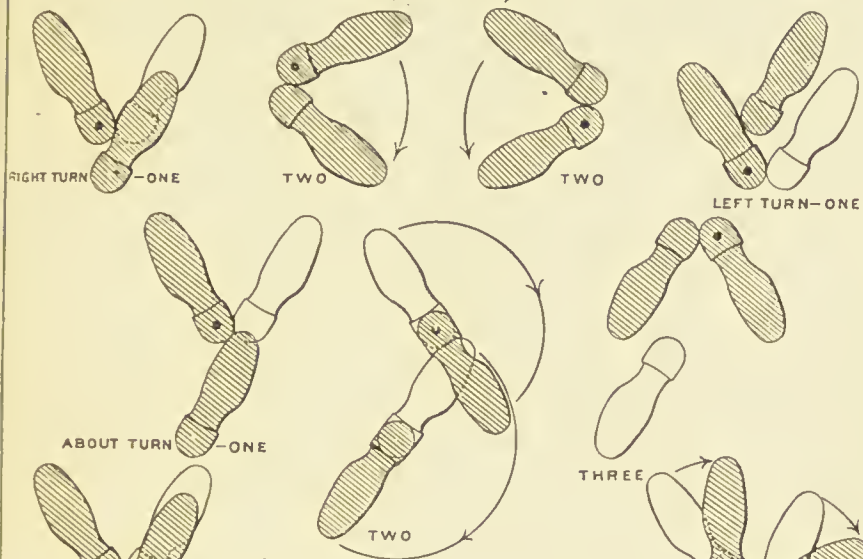
CAUTION.—*Stand at ease, judging the time.*

Stand at— On the word "Ease" go through the movements Ease. described above distinctly, but smartly, and without any pause between them.

# TURNINGS.

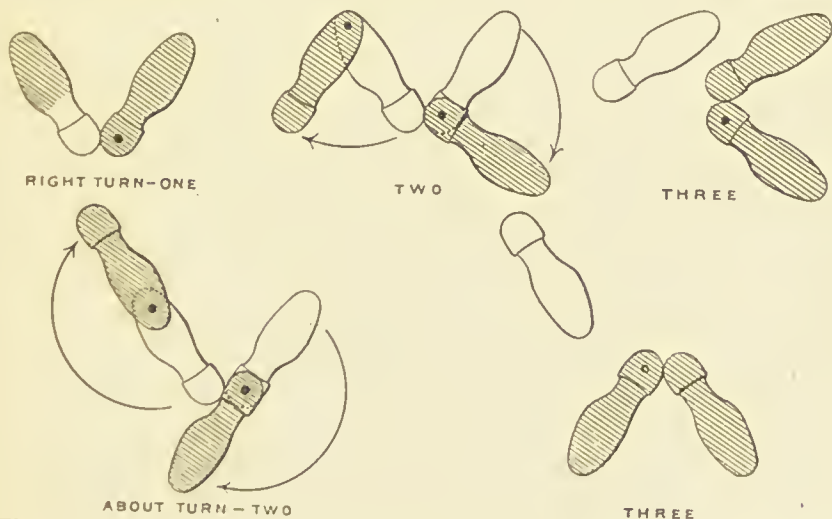
## FIRST METHOD.

By Numbers.



## — SECOND METHOD. —

By Numbers.



Class— As before.  
Attention.

If the command "Stand at ease" be followed by the words "Stand easy," the pupils will be permitted to move their limbs, but they should be cautioned not to move their left feet.

On the word "Class" being given to the pupils standing easy, they will at once assume the position of standing at ease.

The above movements of the hands and arms may be omitted at the discretion of the teacher. The drawing back of the right foot and the bending of the left knee will be quite sufficient to ensure a resting position. With dumb-bells this should be the invariable rule; the same words of command should be used, and the hands retained at the sides.

Standing at ease may also be taught by carrying the right foot to the "Astride," as directed in "Commencing positions," Part II., and placing the hands behind the back, fingers straight, back of the left hand resting in the palm of the right, and the thumb of the right hand in the palm of the left. (Fig. 3.)

## S. 5.—TURNINGS. (PLATE 2.)

### FIRST METHOD.

CAUTION.—*Turnings by numbers.*

In this method of turning the left heel must never quit the ground, but must be used as a pivot. The right foot, at the commencement of all the following motions, must be carried forwards or backwards without a jerk, the movement being from the hip, so that the body may be kept perfectly steady until it commences to turn.

Right turn — On the word "One" place the hollow of the right  
One. foot smartly against the left heel, keeping the  
shoulders square to the front.

Two. On the word "Two" raise the toes, and turn a  
quarter circle to the right on both heels, which must  
be pressed together.

Left turn — On the word "One" place the right heel against  
One. the hollow of the left foot, keeping the shoulders  
square to the front.

Two. On the word "Two," raise the toes and turn a quarter circle to the left on both heels, which must be pressed together.

About turn—One. On the word "One," place the ball of the right toe against the left heel, keeping the shoulders square to the front; and allow the body to incline slightly backwards, so that the weight is equally balanced between both feet, which must be flat on the ground.

Two. On the word "Two," raise the toes and turn about to the right on both heels.

Three. On the word "Three," bring the right foot smartly back in line with the left.

Half right (left) turn—One. On the word "One," draw back (or advance) the right foot one inch.

Two. On the word "Two," raise the toes and turn half (or left) on both heels.

When a class has become proficient in executing the above turnings by numbers, it should be taught to do them judging the time, the same words of command being used, omitting the "One," "Two," and "Three," care being taken that the right foot is not moved until the word "Turn" is given.

If the above method of turning is not approved, the following may be substituted, though on the score of simplicity neither is preferable to the other.

## SECOND METHOD.

CAUTION.—*Turnings by numbers.*

Right turn—One. On the word "One," raise the left heel smartly about one inch from the ground.

Two. On the word "Two," raise the fore part of the right foot slightly, and turn a quarter circle to the right on the right heel and left toe, still keeping the left heel off the ground.

Three. On the word "Three," close the heels smartly by bringing the left foot to the right.

FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.



FIG. 5.





Left turn— On the word “One,” raise the right heel smartly  
One. about one inch from the ground.

Two. On the word “Two,” raise the fore part of the left foot slightly, and turn a quarter circle to the left on the left heel and right toe, still keeping the right heel off the ground.

Three. On the word “Three,” close the heels smartly by bringing the right foot to the left.

About  
turn—One. On the word “One,” raise the left heel smartly about one inch from the ground.

Two. On the word “Two,” raise the fore part of the right foot slightly and turn a half circle to the right on the right heel and left toe, still keeping the left heel off the ground.

Three. On the word “Three,” close the heels smartly by bringing the left foot to the right.

The half turn, right or left, in either method is performed in like manner, turning an eighth of a circle.

In executing the second method of turnings judging the time, the first and second movements are combined in each case, so that all turnings are performed in two movements. The same words of command should be used, omitting the “One,” “Two,” and “Three,” and no movement is to take place until the word “Turn” is given.

In performing the turnings of either method, the shoulders must be kept square to the front during the first movement, and the knees must remain straight throughout.

A great saving of time will be effected, when teaching turnings to children, by allowing them to count the numbers audibly when judging the time.

After any of the foregoing turnings, the word “Front” may be given, on which the whole will turn, as accurately as possible, to their former front, showing each movement correctly, and judging the time.

If the command “Front” is given to a class which has previously turned about, it will always turn about to the right in

coming to the front. There is no necessity for teaching children the "About turn" to the left, hence its omission.

It must be strictly borne in mind that, in order to secure uniformity throughout a school, the method of turning adopted must be used exclusively in all classes.

## S. 6.—FORMING AND SIZING A COMPANY IN TWO RANKS

CAUTION.—*In two ranks.*

Fall—In. On the command "Fall in," the pupils will take their places in succession, the tallest on the right, the next in height one pace in rear, and so on from right to left. The rear rank will cover those in front correctly, each front and rear rank pupil forming a file.

When the class consists of an uneven number of pupils, the third from the left of the rear rank will be the incomplete file.

The above is the formation of a class in two ranks sized from right to left, *i.e.*, the tallest pupils are on the right and the shortest on the left; or the class may be formed with the tallest on the left and the shortest on the right. (Plate 3 (a) ).

From a single rank, to size a class as above :—

Size in single rank, tallest to their height, tallest or shortest on the right, or shortest on the right, direct them to number; then order the even numbers to take a pace backwards. Cautioning No. 1 to stand fast, give the command "Form company, right close, quick--March." The whole with the exception of No. 1 will close to the right (S. 13) and March. Form company, right close, quick--March.

From a single rank, to size a class in two ranks, the tallest pupils on the right and left, and the shortest in the centre :—

Arrange the pupils in single rank, and direct them to number as above; then order the odd numbers to take a pace forwards,



and the even numbers to take a pace backwards. Cautioning No. 1 to stand fast, give the command "Ranks, right and left—Turn," upon which the front rank will turn to the right, the rear rank to the left. Then on the command "Form company, quick—March," No. 3 forms up in rear of No. 1, No. 5 halts and fronts on the left of No. 1, No. 7 forms in rear of No. 5, and

(a)

PLATE 3.

(b)



(a) CLASS SIZED IN TWO RANKS, TALLEST ON THE LEFT, SHORTEST ON THE RIGHT, "FALL—IN."

(b) CLASS SIZED IN TWO RANKS, TALLEST ON THE RIGHT, SHORTEST ON THE LEFT, AND TURNED TO THE LEFT IN FILE, "DISTANCE, FORWARDS—MARCH."

so on, the rear rank wheeling round to the right, and following the left hand pupil of the front rank. The odd or incomplete file, if there be one, is to be placed as above directed. (Plates 1 and 4 (a) .)

In a class of boys or girls, consisting of twenty files, whose average age is ten years, the length of the line is about twenty-six

feet. When opened out at half or full interval (S. 17), the length of the line is about thirty-one and forty-seven feet respectively.

(a)

PLATE 4.

(b)



(a) CLASS SIZED IN TWO RANKS, TALLEST ON THE RIGHT AND LEFT, SHORTEST IN THE CENTRE, "ATTENTION."

(b) CLASS SIZED IN TWO RANKS, TALLEST ON THE LEFT, SHORTEST ON THE RIGHT, "HALF INTERVAL FROM THE RIGHT—DRESS."

### S. 7.—DRESSING A CLASS IN TWO RANKS.

Eyes—Right. On the word "Right," the right hand pupil will remain steady; the remainder of the front rank will direct their eyes to the right, at the same time turning the head smartly in that direction.

Class—  
Dress.

On the word "Dress," the pupils, except number one, will take up the dressing by short quick steps, touching with the right fore-arm the left fore-arm of the next pupil on the right, advancing or retiring till they can see the lower part of the face of the second pupil beyond them, *keeping the body and head erect*, and shoulders square to the

(a)

PLATE 5.

(b)



(a) CLASS SIZED IN TWO RANKS, TALLEST ON THE RIGHT, SHORTEST ON THE LEFT, "EYES-LEFT."

(b) CLASS SIZED IN TWO RANKS, TALLEST ON THE RIGHT AND LEFT, SHORTEST IN THE CENTRE, "FULL INTERVAL FROM THE RIGHT-DRESS."

front. The rear rank will continue looking to the front, correcting their distances as the front rank takes up the dressing and covering correctly.

Eyes—  
Front.

Turn the head and eyes sharply to the front.

Dressing from the left can be taken up in a similar manner. (Plate 5 (a).)

### S. 8.—BALANCE STEP.

---

The object of the "Balance step" is to teach the free movements of the legs, preserving at the same time perfect squareness of shoulders, and steadiness of body. No labour must be spared to attain this object, which forms the very foundation of correct carriage of body and limbs in walking or marching. The teacher must be careful that the pupils keep their bodies well forward and their shoulders perfectly square during these movements.

CAUTION.—*Balance step, advancing.*

**Front.** On the word "Front," the left foot will be raised from the ground by a slight bend of the knee and carried gently to the front without a jerk, the knee being gradually straightened as the foot is carried forwards, the foot to be turned out at the same angle as when halted, the sole parallel to and clear of the ground, the heel just in advance of the line of the right toe. (Fig. 4).

**Forward.** As soon as the pupils are steady in the above position, the word "Forward" will be given, on which the left foot will be brought to the ground at a full pace forwards and the toes turned out at the same angle as when halted; the heel of the right foot will immediately be raised and held extended to the rear, the weight of the body thrown on to the left foot, and the right knee slightly bent.

**Front.** On the word "Front," by a slight bend of the knee, the right foot will be brought smartly forwards, and so on alternately.

**Class—Halt.** On the word "Halt," which should always be given when the moving foot is to the front, that foot will complete its pace, and the rear foot will be brought up in line with it.

CAUTION.—*Balance step, retiring.*

**Rear.** On the word "Rear," the left foot will be raised from the ground and carried ten inches to the rear, the toe pointing to the ground; toes turned out at the same angle as when halted, both knees to be kept straight. (Fig. 5).

**Retire.** As soon as the pupils are steady in the above position, the word "Retire" will be given, on which the left foot will be brought to the ground a full pace from heel to heel, the right foot will be immediately raised and held extended to the front, as described in the command "Front" in the balance step advancing.

**Rear.** On the word "Rear," carry the right foot to the rear, as directed for the left, and so on alternately.

**Class—Halt.** On the word "Halt," which should always be given when the moving foot is to the rear, that foot will complete its pace, and the other will be brought back smartly in line with it.

Great care must be taken that the feet remain throughout at the proper angle, that the body accompanies the leg, that the inside of the heel is placed on the imaginary straight line that passes through the points on which the pupil is marching, that the body remains straight but inclined slightly forwards, that the head is erect and turned neither to the right nor left.

## S. 9.—MARCHING.—LENGTH OF PACE AND CADENCE.

---

1. *Length of pace.*—In the case of children no definite length of pace can be laid down. All that is necessary is to see that a pace of fair length is taken consistent with the relative sizes of the pupils. Generally the length of pace taken by boys and girls from ten to fourteen years of age averages twenty-five inches.

When opening ranks (S. 19), the length of the side pace taken by boys or girls whose average age is ten years is about twenty inches.

2. *Time.*—In slow time 75 paces are taken in a minute.

In quick time 120 paces are taken in a minute.

In double time 165 paces are taken in a minute.

The cadence of the side or closing pace is the same as that in quick time.

## S. 10.—POSITION IN MARCHING.

---

In marching, the pupils must maintain the position of their heads and bodies as directed in S. 2. They must be well balanced



on their legs. In slow time the arms and hands must be kept steady by the sides, care being taken that the hand does not partake of the movement of the leg. In quick time the arm and hand should swing naturally from the shoulder, the right arm swinging forwards with the left leg and the left arm with the right leg, the hand not to be thrown in advance of the leading foot, nor across the body. The hand must not be raised higher than the waist. The heel should meet the ground first, followed by the fore part of the foot; the heel is then raised, and the toes are the last to quit the ground. The movement of the legs must spring from the hips, and be free and natural. Both knees must be kept straight, except while the leg is being carried from the rear to the front, when the knee must necessarily be a little bent to enable the foot to clear the ground, and the foot should never be advanced beyond the spot where it is intended to be placed.

Marching in *slow time* is merely a step in the training of the pupils between the balance step and the usual pace of quick time; the three most important objects being cadence, uniform length of pace, and direction. When this has been correctly learned, all future marching should, as a rule, be in quick or double time.

### S. 11.—SLOW AND QUICK MARCH.

---

Slow or  
Quick—  
March.

The time having been explained or shown by the teacher, the left foot will be carried a full pace to the front, the right foot will then be carried forwards in like manner, and so on, alternately.

**Class—Halt.** The word “Halt” should be given as the weight is brought on to the left foot; the right will then complete its pace, a pace forward will be taken with the left foot, and the heels closed by bringing the right foot to the left. Thus two complete paces are taken after the word “Halt,” the closing of the heels comprising a third movement.

These two paces are necessary to prevent sliding, particularly in the case of boys when being drilled on an asphalt or paved school yard.

To a class at the “Halt” in line, or when turned to the right

or left in file, the command "Right," "Left," or "About—March" may be given. On the word "March," the whole will turn correctly and step off in quick time in the direction named, without further word of command.

### S. 12.—MARKING TIME.

**Mark—Time.** On the command "Mark time," complete the pace with the advanced foot, after which raise the feet alternately about three inches from the ground, keeping the body and arms steady, and observing the same cadence as when marching.

**Forward.** On the word "Forward," which should be given as the right foot meets the ground, mark time twice, and resume the usual pace by stepping off with the left foot.

From the halt, the command will be "Slow," "Quick," or "Double mark—Time."

When marking time, the word "Halt" should be given as the right foot meets the ground; the left foot will repeat its movement, and the position of attention assumed by bringing the right foot to the left, the cadence being observed.

If the command be "Double mark—Time," the fore-arms must be raised as directed in Sec. 15, and dropped to the sides as the heels are closed in halting.

Children may be taught to turn in any direction when marking time, the words of command being given as directed in S. 5, turning to the right or left in two movements, and to the "About" in three.

### S. 13.—SIDE OR CLOSING STEP.

**CAUTION.** *Right close, by numbers.*

**One.** On the word "One," the right foot will be carried ten inches to the right, the shoulders and face kept square to the front, and the knees straight.

**Two.** On the word "Two," the left foot will be brought smartly to the right, heels touching.

**One.** As before.

**Class—Halt** On the word "Halt," the left foot will be brought to the right, as on the word "Two."



CAUTION.—*Right close, judging the time.*

Right close, On the word “March,” the pupils will carry their  
quick—right feet ten inches direct to the right and instantly  
March. bring the left to them, thus completing the pace ;  
they will take the next pace in the same manner, and  
so on, the cadence being that of the quick march.

Class—Halt. On the word “Halt,” they will complete the pace  
and remain steady.

Closing to the left by numbers, and judging the time, should  
be practised in like manner.

The pupils should also be practised in taking any given number  
of side paces, and then halting without word of command, the com-  
mand to be given thus—“Three paces, right (left) close, quick—  
March.”

#### S. 14.—CHANGING STEP.

Change— On the command “Change step” being given,  
Step. whether the march be in slow or quick time, the  
advancing foot will complete its pace, and the ball of  
the rear foot will be brought up sharply to the heel of  
the advanced one, which will again make a complete  
pace forwards, thus taking two successive steps with  
the same foot in the same time as one ordinary pace,  
without loss of cadence. When in double time,  
changing step may be effected by hopping once on  
either foot

The above may be required when a pupil is out of step.

#### S. 15.—DOUBLE MARCH OR RUNNING.

Double— The time having been explained or shown by the  
March. teacher, the pupils will step off together with the left  
foot, each pace being taken lightly and freely on the  
fore part of the foot, heels kept clear of the ground.  
At the same time they will raise their hands as high  
as the waist, carrying back the elbows and clenching  
the fists, the flat part of the wrist inwards, fore-arms  
close to the waist ; the head to be kept erect, and the  
shoulders square to the front. The knees are to be  
more bent and the body more advanced than in the  
other marches.

Class—Halt. As in S. 11, dropping the hands to attention on the third movement.

To break into “Double time” from the “Quick time” :—

Into double time—  
Double. On the word “Double,” which should be given as the left foot meets the ground, raise the fore-arms smartly as above directed when the right foot meets the ground, and step off in double time with the left foot.

To break into “Quick time” from the “Double time” :—

Into quick time—  
Quick. On the word “Quick,” which should be given as the left foot meets the ground, take three full paces, gradually changing the cadence, so that the fourth may be a full one in the ordinary quick time, and drop the hands to the sides on the fourth pace.

## S. 16.—TURNING WHEN ON THE MARCH.

---

Right—  
Turn. The word “Turn” should be given as the weight is thrown on the right foot, a complete space will then be made with the left foot—on which the turn will be made—and the first pace in the given direction taken with the right foot, without altering the cadence.

Left—  
Turn. Reverse the above, *i.e.*, substitute left for right and right for left.

About—  
Turn. The word “Turn” should be given as the weight is thrown on the left foot; a full pace will then be taken with the right foot—on which the first part of the turn will be made—the turn will then be completed in two more movements by raising the feet alternately from the ground, without losing the cadence, and a full pace taken on the fourth.

Front (Rear)  
—Turn. Turning to the front or rear must be regulated according to circumstances, but in every case the word “Turn” must be given so that the class will turn to the right on the left foot, and to the left on the right foot.

### S. 17.—MARCHING IN FILE.

Marching in file is generally the only way in which marching of any description can be taught satisfactorily to school children in an ordinary playground or hall. Before the class is turned right or left preparatory to the march they should be opened to full (or half) interval as follows :—

**Full (Half) interval from the right—Dress.** The right hand file will stand fast ; the remainder of the class will close to the left (S. 13) until they are at arm's length from their neighbouring file. When sufficient interval has been obtained the right arm and hand should be extended with the palm upwards, and the dressing taken up from the right (S. 7). The pupils in the rear rank will not extend their arms, but will correctly cover the front rank, at the same time looking to the front. (Plate 5 (b) .)

If the command be “Half interval,” the class will proceed as above, but instead of extending the arm the hand will be placed on the hip, fingers to the front, thumbs to the rear, and the distance proved by touching the left arm of the pupil next on the right with the right elbow. (Plate 4 (b) )

Interval from the left can be done in a similar manner, raising the left arm, the pupils taking up their dressing from the direction in which the arm is raised.

**Eyes—Front.** Turn the head and eyes sharply to the front, and drop the raised arm smartly and quietly to the side.

To regain the original formation, give the command “Close on the right (left), Quick—March.” The file named will stand fast : the remainder will close as directed and take up the dressing (S. 7). On the command “Eyes—Front,” proceed as directed in (S. 7).

The following is another method of opening a class at intervals preparatory to marching in file :—

**Right (Left)—Turn.** As directed in S. 5.

**Distance forwards—March.** On the word “March,” the whole, except the file on the right (left), will mark time (S. 12), at the same time raising the arms forward horizontally, palms facing inwards, and proving the distance by advancing

or retiring until the finger points touch the outer part of the shoulders of the pupil next in front, continuing to mark time and covering correctly. (Plate 3 (b) .)

**Class—Halt.** On the word “Halt,” proceed as directed in S. 12, dropping the hands to the sides on the second movement.

The word “Covering” implies that the pupils place themselves in a correct line, so that the head of the one next in front of them will conceal from view the heads of those in the same rank beyond. The word “Cover” when opening and closing ranks (S. 19) has the same meaning.

**Quick—March.** The whole will step off together at a full pace, and will continue to do so without increasing or diminishing the distance between each other. The leading file should be directed to march straight forwards, the remainder covering correctly and looking straight to the front.

**Class—Halt.** Proceed as directed in S. 11.

There is a great tendency among children to look on the ground when marching, particularly when turning on the march. Any tendency towards this fault should be at once checked.

If any opening out or loss of distance has taken place when marching in file, the teacher should not halt the class, but should give the command “Mark time in front.” The leading file will mark time (S. 12), and the remainder will close up to their proper distance, each file in succession, on correcting the distance, marking time until a further word of command is given. This rule must be strictly observed before a class is halted whenever any distance has been lost while marching.

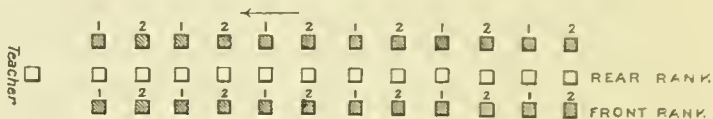
A class in two ranks, at full interval and turned to the right in file, may be formed into one of single file for the purpose of figure marching or performing exercises when on the march as follows:—

**Form single rank—March.** The pupils of the rear rank will take a pace to the rear with the right foot, and one to the left with the left foot, closing the heels, and covering correctly.

**Form two ranks—March.** The original rear rank pupils will take one pace to the right with the right foot, and one to the front with the left foot, closing the heels, and covering correctly.

Plate.6.

# OPENING RANKS.



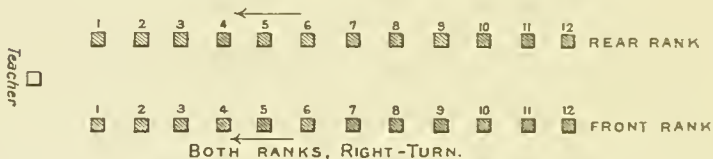
FIRST METHOD. REAR RANK ONE PACE TO THE RIGHT-MARCH



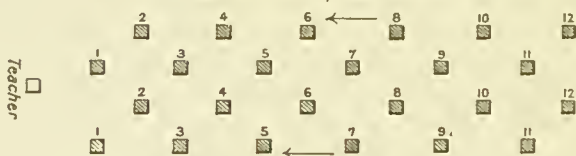
EVEN NUMBERS ONE PACE TO THE RIGHT - MARCH.



THIRD METHOD. FRONT RANK THREE PACES FORWARDS-MARCH.



BOTH RANKS, RIGHT-TURN.



ODD NUMBERS TO THE LEFT, EVEN NUMBERS TO THE RIGHT-MARCH.



FOURTH METHOD. ONES TO THE LEFT, THREES TO THE RIGHT-MARCH.

### S. 18.—WHEELING IN FILE.

A class when marching in single rank or in file should be taught to change its direction by wheeling to the right or to the left, or to the right (or left) about, as follows:—

Right (Left), On the word “Wheel,” the leader or leading file will  
(Right move round a quarter, or half, of the circumference of  
about), a circle having a radius of three feet, the others follow-  
(Left about) ing in the same footsteps in succession without increas-  
—Wheel. ing or diminishing their distances from each other or  
altering the cadence, but lengthening the pace a little  
with the outer foot as they wheel. (Plate 1.)

### S. 19.—OPENING AND CLOSING RANKS.

There are several ways for opening a class for the performance of physical exercises, whether it be first formed in single or double rank. Different methods must be adopted according to the number of pupils in the class and the space available.

The following will be found to be the most suitable methods when dealing with a class of children assembled in one or two ranks, facing to the front, and correctly sized (S. 6.)

#### FIRST METHOD.

In twos— Number from right to left in twos, each rear rank  
Number. pupil taking the same number as the one in front, *i.e.*,  
each file has the same number.

Right— Both ranks turn to the right.  
Turn.

Rear rank, The rear rank will take a pace of twenty inches to  
one pace to the right— the right.  
March.

Even num- The twos in each rank will take a pace of twenty  
bers one inches to the right. (Plate 6.)  
pace to the  
right—  
March.

The ranks may be placed further apart in this method by directing *both* ranks to take a pace outwards, and the even numbers of both to take a pace to the right.

To RE-FORM THE CLASS, reverse the above, substituting left for right and right for left.



## SECOND METHOD.

In twos— As directed in First Method ; or, instead of num-  
Number. bering, the first pupil may say "Left," the second  
"Right," the third "Left," and so on.

Right— Both ranks turn to the right.  
Turn.

Open ranks Both ranks take two paces of twenty inches out-  
—March. wards. (Plate 7.)

Ones to the The odd numbers of each rank will take a pace of  
left, twos to twenty inches to the left, and the even numbers of  
the right— both ranks a similar pace to the right, and cover.  
March. (Plate 8.)

If "Left" and "Right" are used instead of numbers, each pupil steps to the left or right accordingly.

## TO RE-FORM THE CLASS :—

Ones to the The odd numbers will take a pace to the right, and  
right, twos the even numbers a pace to the left, and cover.  
to the left—  
March.

Close ranks Both ranks take two paces inwards, and cover.  
—March.

## THIRD METHOD.

In twos— As directed in Second Method.  
Number.

Front rank On the word "March," the front rank will take  
three paces three paces forwards.  
forwards—  
March.

Right— Both ranks turn to the right.  
Turn.

Ones to the The odd numbers of each rank take a pace to the  
left, twos to left, and the even numbers a pace to the right, as  
the right— directed in second method. (Plate 6.)  
March.

## TO RE-FORM THE CLASS :—

Ones to the The above will be reversed.  
right, twos  
to the left—  
March.





OPENING RANKS, SECOND METHOD, "OPEN RANKS—MARCH."  
(The arrows indicate the position of the class when turned to the right in *etc.*)  
BATTERSEA PARK BOARD SCHOOL, LONDON, S.W.

Left—Turn. Both ranks turn to the left.

Rear rank The rear rank will take three paces forwards, and three paces forwards—cover.  
March.

If more room is required between the pupils than the foregoing methods allow, the class in each case, after numbering, should be opened to half or full interval (S. 17) before the ranks are opened.

When the accommodation is limited, as in a corridor or narrow hall, the following method of opening the ranks may be adopted instead of any of the foregoing. (This method can be adopted whether the ranks have been previously opened at intervals or not.)

#### FOURTH METHOD.

The class to be assembled in single rank (S. 1).

In threes— The class will number in threes from right to left.  
Number.

Right—Turn. The whole will turn to the right.

Ones to the The ones will take a pace to the left, and the threes left. threes a pace to the right. (Plate 6.)  
to the right—  
March.

To RE-FORM THE CLASS, reverse the above, substituting left for right and right for left.

The same method can be used with a class in two ranks by numbering the front rank as above directed, opening the ranks as in second method, and directing the ones and threes to act as above.

If a very large class is being dealt with in a playground, the pupils should be placed in two or three single ranks three yards apart, numbered and opened out as directed above, the ones and threes taking two paces outwards instead of one.

When a class is opened out in four ranks in the first method preparatory to the performance of physical exercises, the distance between the outer ranks is about five-and-a-half feet. In the second method the distance between the outer ranks is about twelve feet, while in the third method, from a single rank, it is about eleven feet.

In all formations an additional space, equal to that occupied by the outstretched arms of the pupils in the outer ranks when lunging sideways, must be allowed.



OPENING RANKS, SECOND METHOD. "ONES TO THE LEFT, TWOS TO THE RIGHT--MARCH."  
(The arrows indicate the position of the class when turned to the right in file.)  
BATTERSEA PARK BOARD SCHOOL, LONDON, S.W.

Where ample room exists, marching can be practised with great advantage by a class in any of the above formations, whether in quick or double time; but no attempt should be made to introduce wheeling to the right or left, though each rank may wheel right or left about independently. When children march in an open formation each child feels a certain amount of responsibility, which is not the case when following a leader in file. In the open formation a sense of distance and dressing is engendered. The teacher can note at once any slovenliness on the part of the scholars, as the class occupies as small a space as possible consistent with freedom of movement. The pupils can also notice inaccuracies in others, and correct them in themselves. (Plate 1.)

If distance is lost during marching in such open formation, the command "Mark time" should be given, so that the pupils may correct their distance and dressing before halting, &c. (S. 17.)

The formation of fours is seldom, if ever, required in connection with the physical training of school children, hence its omission in this manual. Still, should circumstances necessitate such a formation, *e.g.*, in order to march a class a given distance to or from a school, &c., the following is a simple way of obtaining the formation, and one which does not necessitate any previous instruction:—

The class should be formed in two ranks, properly sized and numbered (Plate 4 (a).) Turn the class to the right, give the command "Odd numbers one pace outwards—March"; after which, "Even numbers one pace forwards—March." The class will then be in fours. To resume the original formation, reverse the above proceedings. (Plate 1.)

## S. 20.—DISMISSING.

Right—            The class will turn to the right in the usual  
Turn.            manner.

Class—            On the word "Dismiss," the front rank will take a  
Dismiss.           side pace to the left, and the rear rank a side pace to  
the right; after a pause the class will disperse quietly.

When there is only one rank, it will act as a front rank.

## PART II.

# PHYSICAL EXERCISES.

---

### COMMENCING POSITIONS

---

Commencing positions are those which are assumed prior to performing the various exercises, or as intermediate movements. They are valuable in themselves as exercises for younger children, and are capable of great variation by being exercised singly or in groups; but the chief object in introducing them here is to enable the pupils to execute them correctly at the outset, thus obviating a repetition of their description in the groups of exercises wherein they occur. They may be described under two heads: (*a*), positions for the upper limbs; (*b*), positions for the lower limbs.

#### POSITIONS OF THE UPPER LIMBS.

Class— See Preliminary Drill (S. 2).  
Attention.

Hands on— Raise the fore-arms sharply, and place the palms on  
Hips. the hips, fingers to the front, thumbs to the rear, the elbows and wrists being in the same vertical plane as the shoulders, the latter, with the wrists, being kept down and pressed backwards. (Fig. 10.)

If with dumb-bells in the hands place the knuckles on the hips, backs of the hands downwards. (Fig. 6.)

Class— Drop the hands smartly and quietly to the position  
Attention. of attention.

Arms upwards— Raise the fore-arms until the hands are in front of,  
Bend. and touching, the outer edge of the breast close to the armpits, backs of the hands to the front, the fingers lightly clenched, the upper arms parallel to and touching the sides, the hands as wide apart as the shoulders, the latter being kept down and forced backwards. (Fig. 7.)

Class— Drop the fore-arms smartly and quietly to the sides,  
Attention. and straighten the fingers.



# COMMENCING POSITIONS



ATTENTION



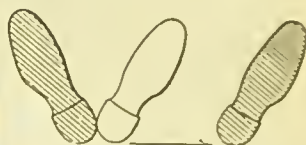
FEET-CLOSE



FEET CLOSE & FEET-OPEN



FEET-CLOSE, LEFT  
FOOT-ASTRIDE



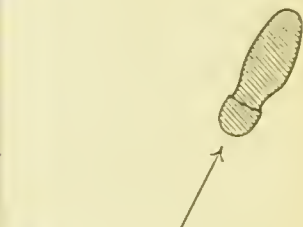
FEET-OPEN, RIGHT FOOT-  
ASTRIDE



FEET-CLOSE, LEFT FOOT ONE  
LENGTH-FORWARDS



NECK-REST, HEELS-RAISE.



FEET-OPEN, RIGHT FOOT TWO  
LENGTHS-FORWARDS



BOTH FEET - ASTRIDE



RECOVER

Arms forwards—Bend. Bend the elbows sharply, raise the upper arms outwards to a horizontal line, with the fore-arms sharply bent upon them, the hands straight and the points of the middle fingers meeting in front of, and in line with, the upper part of the body, palms facing downwards, the thumbs touching the breasts. (Fig. 8.)

Class—Attention. Drop the arms smartly and quietly to the sides.

Neck—Rest. Raise both upper-arms sideways, bending the elbows smartly at the same time, and interlock the fingers behind the neck, or lay the fingers of the right hand over those of the left, forcing the elbows well back until the fore-arms are in one straight line, keeping the head erect. (Plate 9.)

Class—Attention. Drop the hands smartly and quietly to the sides.

The above positions may be practised in succession without resuming the position of attention

#### POSITIONS OF THE LOWER LIMBS. (PLATE 9.)

COMMENCING POSITIONS.—“*Hands on—Hips*”; or “*Neck—Rest*.”

Feet—Close. Keeping the knees perfectly straight, raise the toes slightly, smartly close the fore part of the feet by pivoting on the heels, and lower the toes to the ground.

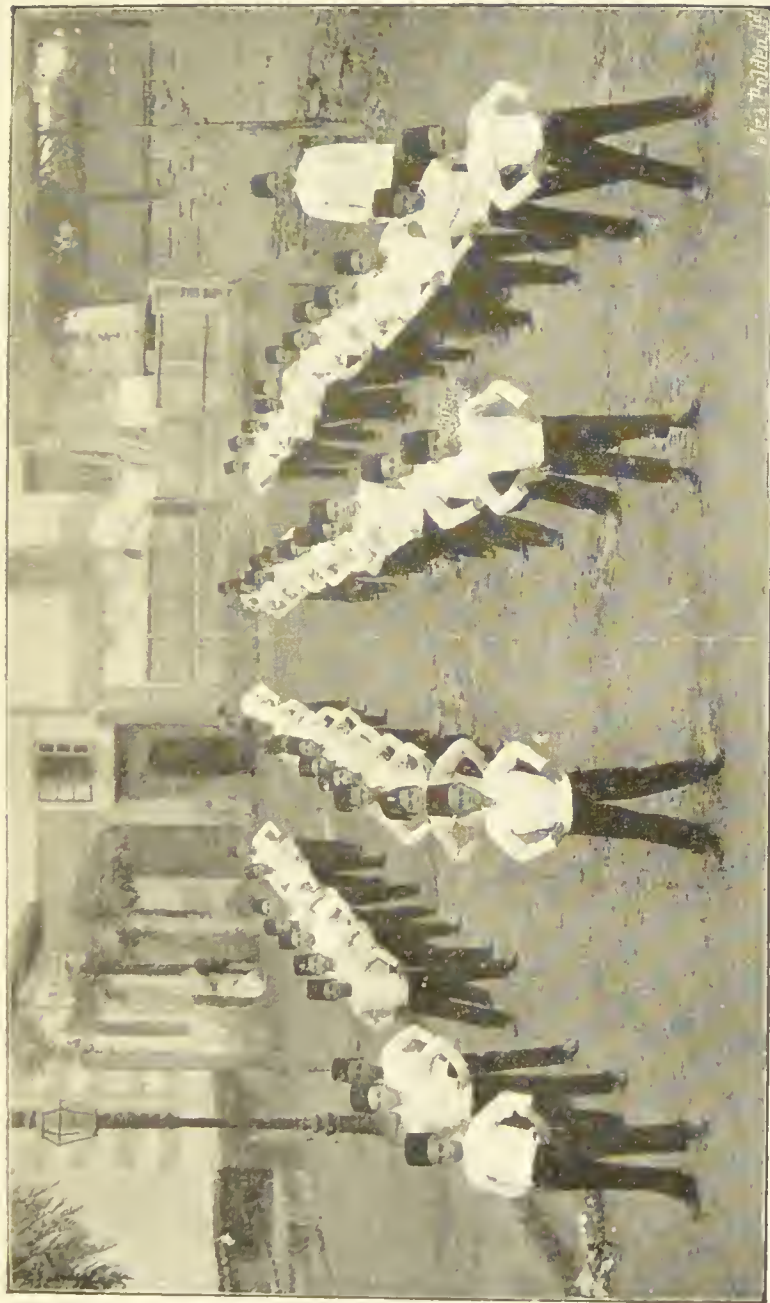
Feet—Open. Raise the toes slightly, separate the fore part of the feet by pivoting on the heels, and lower the toes to the ground, thus assuming the position of attention.

Feet close and feet—Open. Perform the two preceding movements, observing a slight pause between them, care being taken that each movement is distinctly performed, and that the heels are firmly pressed together throughout.

Right foot—Astride. Carry the right foot its own length to the right, still keeping the feet at the same relative position as in the commencing position, *e.g.*, if the commencing position is “Feet close,” the feet would be parallel to each other when separated; if “Feet open,” they would be turned out at the same angle as when at attention, body equally balanced between the feet, and both knees straight.



- Class— Close the heels by bringing the right foot smartly  
 Recover. to the left.
- Left foot— Repeat the above with the left foot.  
 Astride.
- Class— As before, bringing the left foot to the right.  
 Recover.
- Both feet— Spring quickly a few inches from the ground by  
 Astride. slightly bending the knees, separate the feet as they  
 ascend, and carry both outwards to the position of  
 "Astride," the toes being first to meet the ground,  
 and both knees straight.
- Class— Keeping the trunk erect, spring quickly a few inches  
 Recover. from the ground by slightly bending the knees and  
 close the heels smartly.
- Right foot Carry the right foot once (twice) its own length for-  
 one (two) wards, in the same direction as that in which the toes  
 lengths— were pointing when in the position of attention, and  
 Forwards. place it smartly and firmly on the ground, both knees  
 being kept straight, and the shoulders square to the  
 front, the body being equally balanced between both feet.
- Class— Keeping the knees straight, close the heels smartly  
 Recover. by bringing the right foot to the left.
- Left foot Repeat the above by carrying the left foot forwards.  
 one (two) N.B.—When moving the feet, care must be taken that  
 lengths— they are lifted, and not dragged along the ground.  
 Forwards.
- Class— As before, bringing the left foot to the right.  
 Recover.
- Right foot Carry the right foot three times its own length for-  
 three lengths wards in the same direction as that in which the toes  
 —Forwards. were pointing when in the position of attention; the  
 right leg bent at the knee, which must be vertically  
 over the instep; the shoulders brought square in the  
 direction in which the foot is pointing, by turning on  
 the hips; the trunk inclined forwards and in line with  
 the left leg. The latter must be kept rigid, with the  
 foot retained flat and firmly on the ground; the head  
 erect, and the eyes looking in the direction in which  
 the advanced foot is pointing. (Fig 9.)



COMMENCING POSITIONS, "HANDS ON HIPS, LEFT FOOT—ASTRIDE."  
(Class dressed at half interval. Ranks opened in Third Method.)  
ABDIN SCHOOL, CAIRO, EGYPT.

Class— Press firmly on the right foot, straighten the knee  
 Recover. and close the heels, turning the shoulders to the front.

Left foot Repeat the above by carrying the left foot forwards.  
 three lengths The above remark regarding the lifting of the feet  
 —Forwards. applies in this instance.

Class— As before, bringing the left foot to the right.  
 Recover.

Heels—Raise. Keep the heels together and raise them as high as  
 possible, bringing the whole weight of the body on the  
 fore part of the feet, the body and legs being kept  
 perfectly straight, and the knees together. (Plate 9.)

Heels— Lower the heels slowly, keeping the knees straight.  
 Lower.

Heels raising and lowering may be practised from any of the foregoing positions of the lower limbs.

If the command "Attention" be given after any of the foregoing positions of the lower limbs, proceed as directed in "Recover," dropping the hands to the sides.

N.B.—In all subsequent exercises, where no reference is made to the feet in the commencing positions, or where no commencing position is mentioned, that of "Attention" is inferred.

The whole of the foregoing can be varied so as to permit of two movements being performed simultaneously, by modulating the voice, and preceding the command by the word "With," thus:—"With hands on hips, right foot—Astide"; "With neck rest, right foot one length—Forwards," &c. (Plates 10 and 11.)

When in the position of "Left foot astride," or "Left foot one, two, or three lengths forwards," the command "Feet—Change" may be given. The heels will then be closed in each case as directed under "Attention," and after a slight pause the exercise repeated with the right foot, observing the same directions respecting the relative positions of the head, trunk, limbs, &c.

The pupils should be directed to count the time audibly, as "One," "Two," "One," "Two," when changing from one position to another in the various exercises. This is an excellent way to ensure rhythmical movement, and will obviate the repetition of the words of command. It also interests the pupils in the exercises, and acts unconsciously as respiratory movements. These remarks apply to the whole of the subsequent physical exercises.

*Hands on hips*:—Assists in maintaining the erect position of the



Gale & Polden Ltd

COMMENCING POSITIONS, "HANDS ON HIPS, RIGHT FOOT ONE LENGTH—FORWARDS,"  
(*Two Classes, Ranks Opened in Second Method.*)

CRAWFORD STREET BOARD SCHOOL, LONDON, S.W.



body, firmness of posture, and squareness of the shoulders during the several movements wherein it is introduced, and relieves the chest of the weight of the shoulders during respiratory movements, and transmits it to the hips.

*Arms upwards and forwards bend* :—By the former a powerful contraction of the flexor muscles situated in the chest walls, arms, wrists, hands, and fingers takes place ; in the latter flexion of the elbow-joints, extension of the wrists, hands and fingers, and a vigorous contraction of the muscles surrounding the shoulder-joints occur simultaneously, while the shoulders and ribs are elevated.

*Neck rest* :—Ensures a rigidity of the head and shoulders, especially requisite when exercises for the loins and waist are performed, the sternum and ribs being thereby raised. The muscles in the upper part of the back are brought into action in opposing the forward inclination of the head.

*Feet close and open* :—Strengthens the hip-joints and muscles surrounding them. If performed whenever the correct position of the feet at attention has been lost, it will materially assist in counteracting the usual tendency of children to stand with their feet parallel, or with their toes turned inwards.

*Astride* :—Increases the effort required to perform certain exercises, *e.g.*, if used as a commencing position to the “Knees bending and stretching,” and also assists in the performance of other exercises by enlarging the basis of support.

*Foot one length (or two lengths) forwards* :—Chiefly introduced as exercises for the lower limbs when the upper ones are being exerted. “Leg and hip movements,” also “Trunk movements,” are greatly augmented if done from these positions. When three lengths forwards, the movement supplies the place of lunging for the younger children, the lower limbs and trunk being vigorously exercised.

*Heels raise* :—Acts chiefly on the ankle-joints, calves, front of the thighs—if the knees are braced well backwards—and on those muscles which assist in retaining the equilibrium and rigidity of the body.

FIG. 6.



FIG. 7.



FIG. 8.



FIG. 9.



FIG. 10.



FIG. 11.



FIG. 12.



FIG. 13.



FIG. 14.



## HEAD MOVEMENTS.

### FIRST PRACTICE.

CAUTION.—*Head sideways bending.*

COMMENCING POSITIONS.—“*Attention*,” “*Hands on—Hips*” or “*Hands on hips—Astride*.”

Head to the right—Bend. Keeping the body upright, and shoulders square to the front, slowly bend the neck sideways to the right (One.) until the ear is as near as possible to the shoulder, which must not be raised.

Upwards—Stretch. Slowly raise the head again.

(Two.) Repeat to the left. If by numbers—(Three), (Four). (Fig. 10).

### SECOND PRACTICE.

CAUTION.—*Head forwards and backwards bending.*

COMMENCING POSITIONS, as in *First Practice*.

Head forwards—Bend. Keeping the body upright and shoulders square to the front as in the First Practice, lower the chin (One.) slowly until it touches the breast, the back of the neck being well stretched, and eyes directed downwards. (Fig. 11).

Upwards—Stretch. Slowly raise the head again.

(Two.)

Head backwards—Bend. Keeping the body perfectly upright, carry the head slowly backwards as far as possible, stretching the front (Three.) of the neck, the eyes directed upwards. (Fig. 12).

Upwards—Stretch. Slowly raise the head again.

(Four.)

### THIRD PRACTICE.

CAUTION.—*Head turning.*

COMMENCING POSITIONS, as in *First Practice*.

Head to the right—Turn. Keeping the shoulders square as in the First Practice, slowly turn the head and neck to the right until the chin is over the shoulder, looking in that direction, and keeping the head erect. (One.)



Front-Turn. Slowly turn the head to the front again.

(Two.)

Repeat to the left. If by numbers—(Three),  
(Four). (Fig. 13.)

*Head movements*:—Require no great amount of muscular exertion in their performance, the object being only to render mobile and to strengthen the muscles and joints in the neck. Being classified as above they are more readily referred to in the description of those subsequent movements in which they are introduced.

## ARMS RAISING AND SWINGING.

### FIRST PRACTICE.

CAUTION.—*Arms sideways raising.*

Arms side-  
ways—Raise.  
(One.)

Raise the arms smartly sideways until they are in line with the shoulders, which should be forced well to the rear, arms straight and fingers extended, palms downwards.

Arms—  
Lower.  
(Two.)

Lower them smartly to the position of attention.

Repeat (with or without heel raising and lowering), judging the time, the command being, “Judging the time—Commence,” the command “Steady” being given when the hands are at the sides.

### SECOND PRACTICE.

CAUTION.—*Arms forwards and backwards raising.*

One.

Keeping both arms straight, swing them sharply front and rear till the right hand is as high as the shoulder and the left as high as the waist; both arms fully extended, head erect, fingers straight, with the backs of the hands outwards. (Fig. 14.)

Two.

Drop both arms, passing the hands close to the sides, and without pause swing them smartly and freely to the reverse position.

Repeat, judging the time, the command being as in First Practice, “Steady” being given when the arms are extended front and rear.

Class— Drop the hands to the sides.  
 Attention.

### THIRD PRACTICE.

CAUTION.—*Arms sideways raising, and forwards swinging.*

Arms side- As directed in First Practice.  
 ways—Raise.  
 (One.)

Arms for- Swing both arms forwards until they are in front of  
 wards—Swing the shoulders, and parallel to each other, arms and  
 (Two.) fingers straight, and palms turned inwards. (Fig 15 )

Arms out- Swing both arms outwards to the first position,  
 wards— care being taken that they are not swung beyond the  
 Swing. line of the shoulders.  
 (Three.)

Arms— As directed in First Practice.  
 Lower.  
 (Four.)

### FOURTH PRACTICE.

CAUTION.—*Arms sideways and upwards raising.*

Arms side- Raise both arms smartly sideways as directed in  
 waysand up- First Practice, and, by rotating the arms outwards on  
 wards—Raise. passing the horizontal line, continue the movement  
 (One.) until the arms are vertically over the shoulders with  
 the palms turned inwards. (Fig. 16.)

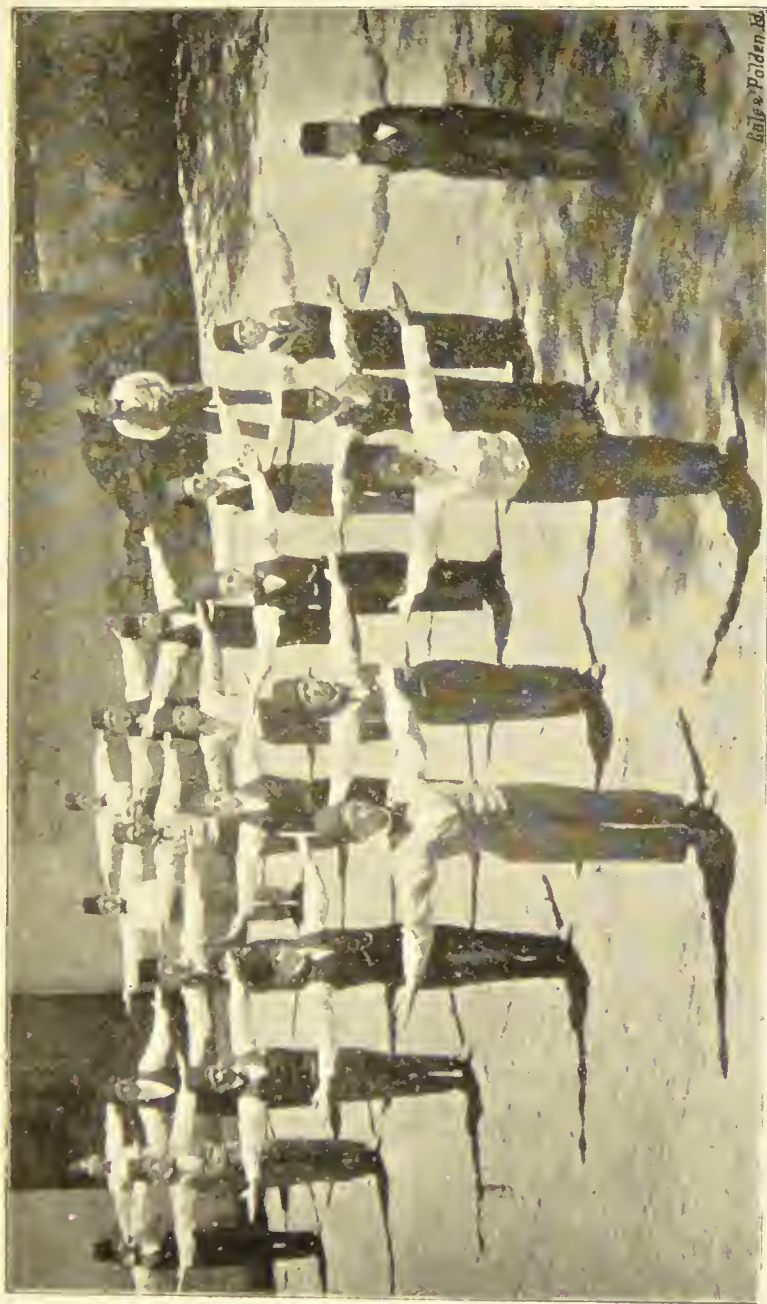
Arms side- Lower the arms smartly outwards, and by rotating  
 ways and the arms on passing the horizontal line, continue the  
 downwards— movement to the position of attention.  
 Lower.  
 (Two.)

### FIFTH PRACTICE.

CAUTION.—*Arms circling.*

Arms side- Raise both arms smartly sideways as directed in  
 ways—Raise. First Practice.  
 (One.)

Arms— Swing both arms sharply downwards, and by cross-  
 Circle. ing them in front of the body (right hand in front),  
 (Two.) continue the circular movement outwards and upwards  
 until both arms are vertically over the shoulders, palms  
 facing inwards, the arms and fingers to be kept  
 straight throughout. (Fig. 16.)



ARMS RAISING AND SWINGING, FIFTH PRACTICE, "THREE."  
(Class dressed at full interval. Ranks opened in Second Method. Pupils turned "half right.")  
KHEDIVIEH SCHOOL, CAIRO, EGYPT.

Arms  
sideways— Lower the arms smartly sideways until they are  
Lower. in line with the shoulders, palms turned upwards.  
(Three.) (Plate 12.)

Class— Rotate the arms, and lower them smartly to  
Attention. attention.  
(Four.)

### SIXTH PRACTICE.

CAUTION.—*Arms swinging.*

Arms for- Keeping the knees straight, swing the arms up  
wards and sharply to the front, until they are perpendicularly  
upwards— over the shoulders, the hands straight on the wrists,  
Raise. palms facing inwards, thumbs close to the forefingers,  
(One.) and the eyes directed to the front. (Fig. 16.)

Arms— Swing both arms freely and sharply to the rear  
Swing. without bending the elbows, down, and passing close  
(Two.) to the thighs, up to the first position again.

Hands— Swing them to the rear as in "Two," but instead of  
Behind. completing the circle, strike the palms smartly  
(Three.) together behind the back, the elbows to be kept  
straight, the palms to remain touching each other, keep-  
ing the head and trunk erect throughout. (Fig. 17.)

Class— With the shoulders kept well forced back, bring the  
Attention. arms and hands smartly to attention.  
(Four.)

When a class becomes proficient in the Sixth Practice by numbers, the pupils should practice the movements, judging the time; the words of command being "One," Caution.—Four times, "Two," the arms will then describe three complete circles, the hands meeting behind as a fourth movement; on the word "Four," as above.

The First, Fourth, and Sixth Practices should be taught slowly at first as respiratory movements. The breathing should be deep, prolonged, and tranquil, inhalation taking place as the arms are raised, and exhalation as they are lowered, the pupils breathing through the nostrils only. In the Third and Fifth Practices exhalation is also to take place on the second movement, and inhalation on the third.

Inhalation and exhalation as above directed have a beneficial effect in expanding the lungs and chest-walls, as well as strengthening those muscles which assist in respiration.

*Arms raising and swinging*:—The first three practices are performed without carrying the arms above the level of the shoulders. They tend to widen the chest and increase its mobility; the muscles of the neck, shoulders, and back being those chiefly employed, particularly those of the shoulders. The Fourth, Fifth and Sixth Practices are movements of the arms carried above the level of the shoulders, and being of a more vigorous nature act more powerfully on the muscles surrounding the shoulder-blades and joints, and those in the chest walls, the whole thus greatly favouring chest development.

The whole of these Practices may be considered as “Shoulder movements,” and are performed without any movement of the elbow-joints.

## ARMS BENDING AND STRETCHING.

### FIRST PRACTICE.

CAUTION.—*Outwards, upwards, and downwards stretching.*

COMMENCING POSITIONS.—“*Astride*,” “*Right (Left) foot one length—Forwards*.”

Arms up- As directed in “Commencing positions,” or the arms  
wards-Bend. may be bent with the hands tightly clenched, nails to  
(One.) the front and *backs* of the hands in front of the  
shoulders, if a more vigorous movement is required.

Outwards— Extend the arms energetically right and left, at the  
Stretch. same time open the hands and extend the fingers in  
(Two.) the same direction, palms downwards. (Fig. 18.)

Arms up- Drop the upper-arms smartly to the sides, and bend  
wards-Bend. the fore-arms, thus assuming the first position.  
(One.)

Upwards— Extend the arms energetically upwards, hands as  
Stretch. wide apart as the shoulders, fingers extended, palms  
(Three.) turned inwards. (Fig. 16.)

Arms up- As before.  
wards Bend.  
(One.)

Downwards— Drop the arms and stretch them smartly downwards  
Stretch. to the position of attention.  
(Four.)



FIG. 15.



FIG. 16.



FIG. 17.



FIG. 18



FIG. 19.

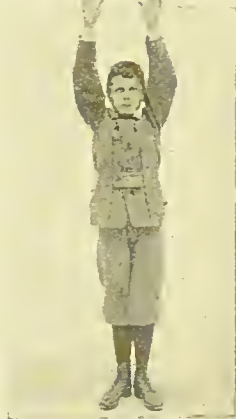


FIG. 20.



FIG. 21.



FIG. 22.



FIG. 23.





If the nails are turned to the front in the "Upwards bend" position, the palms of the upstretched hands should be turned to the front. This remark also applies to the upstretched hand in the Second and Third Practices. (Fig. 19.)

When executing the above practice, judging the time, the "Outwards stretch" should be repeated after the upwards one, thus making four stretches in all.

## SECOND PRACTICE.

CAUTION.—*Simultaneous upwards and downwards stretching.*

Arms up- As in First Practice. (Fig. 7.)  
wards-Bend.

Right arm Stretch the arms energetically in the directions  
upwards, left named, palm of the right hand turned inwards, left  
arm down- stretched down to attention. (Fig. 20.)  
wards—  
Stretch.

Arms up- As before.  
wards-Bend.

Left arm up- Stretch the arms energetically in the directions  
wards, right named, thus reversing the above.  
arm down-  
wards—  
Stretch.

Class— Bring both arms to the "Upwards bend" position,  
Attention. and then stretch them smartly to attention.

## THIRD PRACTICE.

CAUTION.—*Simultaneous upwards and outwards stretching.*

Arms up- As before.  
wards-Bend.

Right arm Stretch the arms energetically in the directions  
upwards, left named, palm of the right hand turned inwards, left  
arm out- palm turned downwards. (Fig. 21.) (*See note above.*)  
wards—  
Stretch.

Arms up- As before.  
wards-Bend.

Left arm Stretch the arms energetically in the directions  
upwards, right named, thus reversing the above. (Plate 13.)  
arm out-  
wards—  
Stretch.

Class— As in Second Practice.  
Attention.



ARMS BENDING & STRETCHING, THIRD PRACTICE. "LEFT ARM UPWARDS, RIGHT ARM OUTWARDS—STRETCH."  
(Class dressed at half interval. Rows opened in Second Method.)  
HONEYWELL ROAD BOARD SCHOOL, LONDON, S.W.

When a class becomes proficient in performing the above practices, the command "Arms upwards—Bend" may be omitted, but the movement is invariably to be performed before any stretching takes place, *e.g.*, if the command be "Arms outwards—Stretch" the arms are first bent and then stretched as directed, the time being "One, Two," a distinct pause being observed between the two movements. Also if the command "Attention" is given from any stretch position—other than the downwards one—the arms are again to be bent upwards before being stretched downwards. This rule is to be strictly observed in every instance where arms stretching takes place.

In the Second and Third Practices the position may be changed without repeating the words of command, *e.g.*, when at "Right arm upwards, left arm downwards, stretch," the command "Arms—Change" may be given, the arms will then be brought to the "Upwards bend," a pause made, and the reverse position assumed.

Also foot and leg movements may be combined with the various stretch positions, *e.g.*, on the command "Right foot one length forwards, arms outwards—Stretch;" the arms are first bent, a pause made, then stretched simultaneously with the foot movement.

*Arms bending and stretching*:—The flexors and extensors of the arms, wrists, hands and fingers, and the muscles of the chest, back, and back of the neck are chiefly engaged. It increases the mobility of the joints, and expands the chest. It has a beneficial influence on the organs of respiration and circulation, especially if the bending movement is executed with energy. Alternate stretching acts more strongly on the various muscles employed than when the arms are stretched alike.

The connection between the arms and the muscles of the chest, both in front and behind, makes it almost impossible for one to be developed without the other; therefore, all movements of the arms tend in some way or other to develop the chest.

## TRUNK MOVEMENTS.

---

### FIRST PRACTICE.

CAUTION.—*Trunk sideways bending.*

COMMENCING POSITIONS.—“*Attention*,” “*Feet—Close*,” “*Neck—Ret*,” or “*Arms upwards—Bend*.”

Trunk to the right (left)—Bend the trunk as far as possible in the direction named, legs kept perfectly straight, heels closed, shoulders square to the front, the head following the inclination of the body, and the eyes directed to the front. (Fig. 22.)  
Bend.

Upwards—Rise slowly to the erect position.  
Stretch.

Class—Smartly assume the position of “*Attention*.”  
Attention.

N.B.—“*Hands on hips*” should not be used as a commencing position to this practice.

### SECOND PRACTICE.

CAUTION.—*Trunk forwards and backwards bending.*

COMMENCING POSITIONS.—“*Hands on Hips, right (left) or (both) feet—Astride*,” or “*Neck—Rest*.”

Trunk forwards—Keeping the spine rigid, bend forwards from the hips slowly, knees straight, head and neck retaining the line of the trunk, chest well arched, and feet firm. (Fig. 23.)  
Bend.

Upwards—Rise slowly to the erect position.  
Stretch.

Trunk backwards—Bend the trunk slowly backwards from the hips, directing the face obliquely upwards, the spine to be kept as straight as possible. (Fig. 24.)  
Bend.

Upwards—Rise slowly to the erect position.  
Stretch.

Class—Drop the hands smartly and quietly to the sides.  
Attention.

## THIRD PRACTICE.

CAUTION.—*Trunk turning.*COMMENCING POSITIONS.—“*Attention*,” “*Feet—Close*,” “*Hands on—Hips*,” or “*Neck—Rest*.”

Trunk to the right (left)—Keeping the hips as firm as possible, turn the trunk steadily to the right (left) until the shoulders are square in that direction, the head retaining the same relative position with the body as when at attention, legs straight and feet firm. (Fig. 25.)

Front—Slowly turn to the front.  
Turn.

Class—As directed in the First Practice.  
Attention.

The foregoing practices may be taught by numbers as directed in “*Head movements*.”

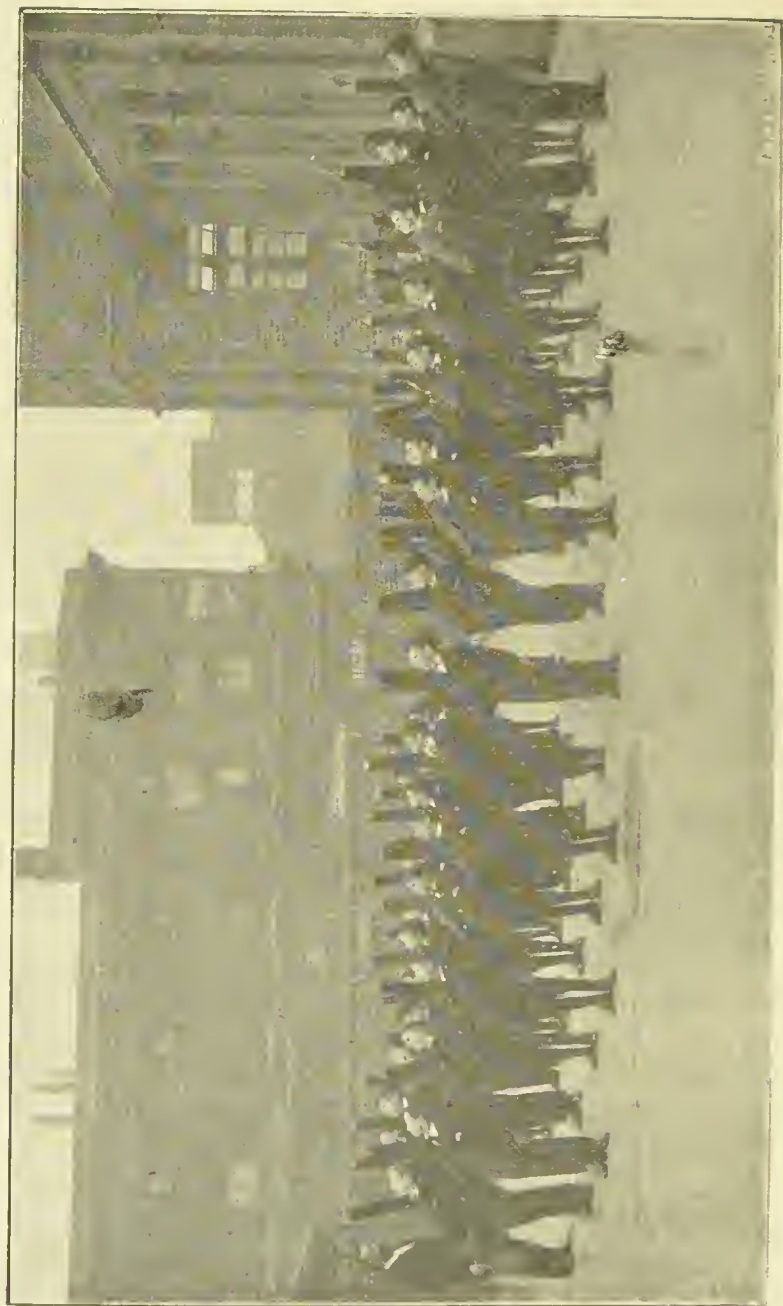
“*Arms upwards bend*” or “*Arms upwards (or outwards) stretch*,” may also be used, with or without “*Astride*,” as a commencing position to the above practice. If the “*Bend*” position only is used, arm stretching outwards and upwards may be introduced when the body is bent in the Second or turned in the Third Practice, and upwards only in the First Practice. The arms may either be brought to the “*Upwards bend*” before the erect position is assumed, or they may be kept stretched until the body is brought erect, after which they should be stretched in two movements to “*Attention*.” When “*Trunk forwards bend*” is done from “*Arms upwards stretch*” position, the movement of the trunk is continued from the hips until the fingers point to the ground between the toes, the head following the direction of the arms, which should be again raised to the front on the command “*Upwards—Stretch*.”

*Trunk movements*:—Act chiefly on those muscles situated in the front and back of the loins and chest, while those on the sides of the waist, &c., are prominently engaged. They increase the circulation, and give elasticity to the spinal column

---



PLATE 14.



TRUNK AND ARM MOVEMENTS, FIRST PRACTICE, "ONE."  
(Class divided at half interval. Ranks opened in Second Method, and turned to the original front.)  
SOUTH LAMBETH ROAD BOARD SCHOOL, LONDON, S.W.



## TRUNK AND ARM MOVEMENTS.

### FIRST PRACTICE.

CAUTION.—*With trunk sideways bending.*

Right arm  
raise—One.

Raise the right arm sideways to the right, by a circular movement, until it is perpendicular over the shoulder, back of the hand to the left, shoulders square to the front, body bent over to the left, the back hollowed, the head turned slightly to the right, and thrown back so that the eyes are directed to the hand, which should remain straight on the wrist, the left arm and hand to remain close to the side, and stretched with the shoulder downwards. (Plate 14.)

In the above position, the right hand should be vertically over the left foot.

Left arm  
raise—Two.

Lower the right arm and raise the left, thus reversing the position of "One," both movements to be simultaneous. (Fig. 26.)

Class—  
Attention.

This command should be given when the left arm is raised. Keeping the arm straight, lower it smartly sideways to the side, and come to attention.

### SECOND PRACTICE.

CAUTION.—*With trunk turning.*

Both arms  
to the right  
—One.

Keeping the arms straight, swing both up to the right until they are perpendicularly over the shoulders, body turned on the hips in the same direction and inclined over to the left, the head thrown back so that the eyes are directed to the back of the hands, which should be separated the width of the shoulders, well stretched upwards and parallel with each other.

Both arms  
to the left—  
Two.

By a circular movement, swing both arms downwards past the front of the body and up to the left, thus reversing the position of "One," care being taken during this movement that the arms are swung loosely from the shoulders, that they pass close to the front of the thighs, that the body and head remain erect, and that the knees are forced well back. (Fig. 27.)

Class— This command should be given when both arms are  
 Attention. to the left. Straighten the body, turn on the hips to the front, and drop the hands to attention, keeping the arms straight and parallel to each other during the movement.

### THIRD PRACTICE.

CAUTION.—*With trunk forwards and backwards bending.*

To the toes— Carry the right foot to the “Astride,” keeping the  
 One. knees perfectly straight, bend the back, and place the finger-points on the toes, or as near to them as possible, the eyes directed downwards, backs of the hands to the front. (Fig. 28.)

To the Straighten the body and bring the arms and hands  
 breasts— to the “upwards bend” position, backs of the hands to  
 Two. the front, elbows forced well down and close to the sides. (Fig. 29.)

Over the Stretch the arms above the shoulders, palms to the  
 shoulders— front, bending back the head and upper part of the body,  
 Three. so that the eyes are directed to the hands. (Fig. 30.)

To the As directed above.  
 breasts—  
 Two.

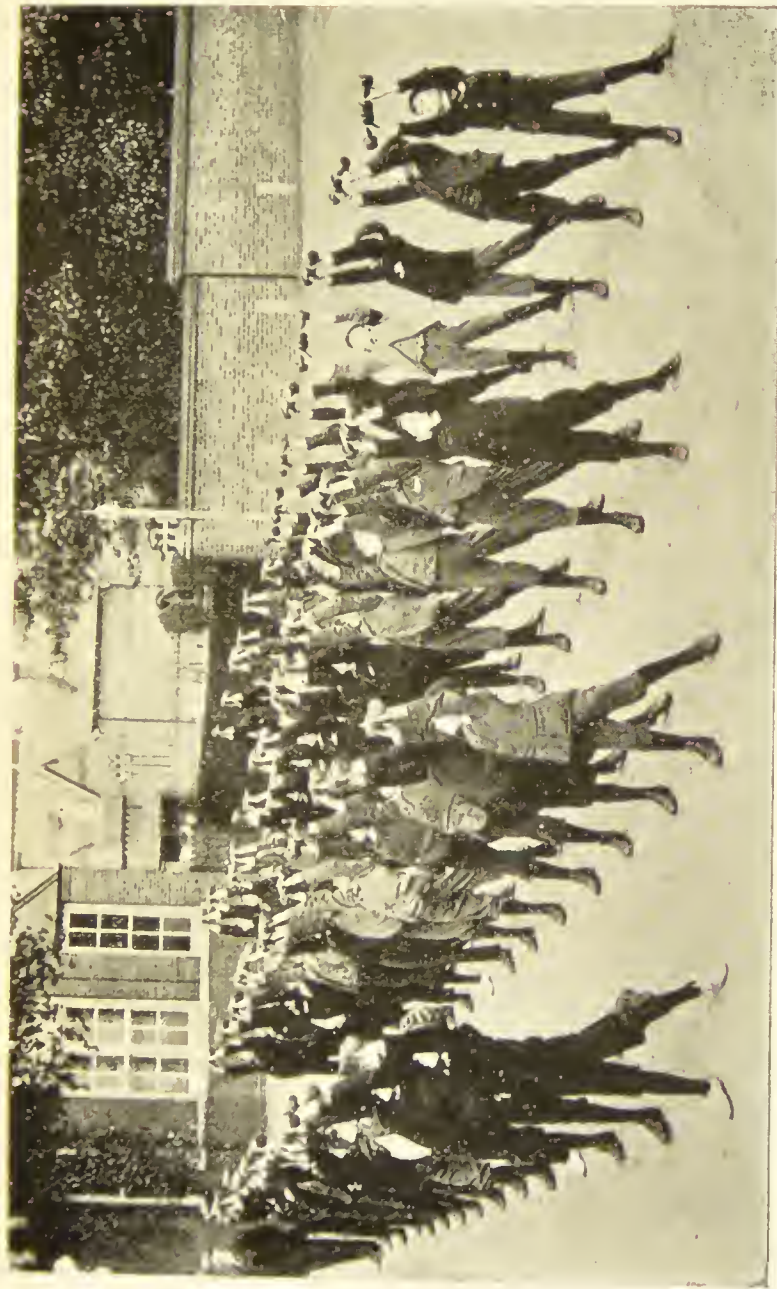
Class— This command should be given when at “Two.”  
 Attention. Bring the right foot to the left, and stretch the arms to attention.

### FOURTH PRACTICE.

CAUTION.—*With trunk turning and foot movements.*

Both arms to Carry the right foot to the right as in “One,” Third  
 the right— Practice, at the same time swing the arms up in the  
 One. same direction as in “One,” Second Practice, the weight of the body to be brought as much as possible on to the right foot, which should be firm and flat on the ground, the left heel raised as high as possible without lifting the toe, and both knees straight. (Plate 15.)

Both arms Swing the arms as directed in “Two,” Second  
 to the left— Practice, reversing the position of the feet only, with-  
 Two. out bending the knees.



TRUNK AND ARM MOVEMENTS, FOURTH PRACTICE, "ONE."

*(Ranks opened in Second Method.)*

DULWICH HAMLET BOARD SCHOOL, LONDON, S.E.

Class— As directed in the Second Practice, bringing the  
Attention. right foot to the left.

N.B.—The above four practices may be combined by using the following commands :—

CAUTION.—*Second Practice (to be given when at “Two,”  
First Practice).*

One. Swing the left arm down and past the front of the body ; when in line with the right one, raise both over the shoulders, thus assuming the position of “One,” Second Practice.

CAUTION.—*Third Practice (to be given when at “Two,”  
Second Practice).*

One. Carry the right foot to the “Astride,” and place the finger-points on the toes, or as near to them as possible, as directed in “One,” Third Practice.

CAUTION.—*Fourth Practice (to be given when at “Three,”  
Third Practice).*

Class— Keeping the arms raised, turn on the hips until the  
Ready. shoulders are square to the left, at the same time raise the right heel, thus throwing the weight on the left foot, both knees straight.

One. Swing the arms as in Fourth Practice.

Class— As directed above.  
Attention.

These practices may also be combined, judging the time, by substituting the word “Change” for the above cautions, the command being, “Commence.” The command “Steady” is to be given when at “Two,” Fourth Practice. On the command “Attention,” proceed as directed in Fourth Practice.

Many of the exercises contained in this manual may be combined in a manner similar to the above ; but the example given will be sufficient to indicate to the teacher the course to adopt when applying music to the various foregoing or subsequent exercises as combinations.

*Trunk and arm movements* :—First Practice combines the “Arms sideways raising,” “Trunk sideways bending,” and “Head move-

FIG. 24.



FIG. 25.



FIG. 26.



FIG. 27.



FIG. 28.



FIG. 29.



FIG. 30.



FIG. 31.



FIG. 32.





ments," thus bringing into simultaneous action the various groups of muscles which were exercised in the individual practices. In the Second Practice, both sides of the chest are simultaneously exercised, while "Trunk turning" and "Head movements" are introduced. In the Third Practice, the "Trunk and head forwards and backwards bending" is combined with "Arms stretching" by which the action of the muscles of the under-thigh and those in the abdominal walls is greatly increased; whilst in the Fourth Practice, the same muscles are used as in the Second Practice, but in a more marked degree, owing to the position of the feet, which causes the whole of the lower limbs to be exercised at the same time by the heel raising and lowering.

The object of combinations is to bring as many parts of the body as possible into vigorous action simultaneously; and to introduce the exercises in succession (without returning to the commencing position where possible) in such a manner, that without any alteration, they may be practised as a musical drill either with or without dumb-bells.

The following music has been specially arranged with a view to its application to the four practices of the "Trunk and arm movements," either as separate practices, or as a combination. It may also be used in connection with any of the preceding exercises, when performed singly.

---



## Trunk and Arm Movements.

*As a combination.*

## 1st PRACTICE.

1 2 1 2

Gin a bo-dy meet a bo-dy Com-in' thro' the rye,

1 2 1 2

Gin a bo-dy greet a bo-dy, Need a bo-dy cry!

## 2nd PRACTICE.

1 2 1 2

Il - ka las-sie has her lad-die, Nane they say hae I— Yet

1 2 1 2

a' the lads they smile at me, When comin' thro' the rye.

## 3rd PRACTICE.

Gin a bo-dy meet a bo-dy Com-in' frae the town;

Gin a bo-dy kiss a bo-dy, Need a bo-dy frown?

## 4th PRACTICE.

Il - ka las-sie has her lad-die, Nane they say hae I— Yet

a' the lads they smile at me, When comin' thro' the rye.

## LEG AND HIP MOVEMENTS.

### FIRST PRACTICE.

CAUTION.—*Knees bending and stretching.*

COMMENCING POSITIONS.—“*Hands on—Hips;*” or “*Hands on hips, right (left) foot—Astride (or) One length—Forwards.*”

Heels— As in “Commencing positions.” (Plate 9.)

Raise. (One.)

Knees— Gradually lower the body by foreing the knees well  
Bend. apart beyond the toes until the thighs and legs are  
(Two.) at right angles, heels pressed firmly together, trunk  
and head erect, eyes directed to the front. (Plate 16.)

Knees— Slowly straighten the knees and resume the first  
Stretch. position.  
(Three.)

Heels— As in “Commencing positions.”

Lower.

(Four.)

Class— Drop the hands smartly and quietly to the sides  
Attention. and come to attention.

When the knees are bent, the “Head movements,” also the First and Third Practices of “Arms bending and stretching,” may be practised. (Fig. 31.)

With advanced pupils, this practice should be taught by numbers, and the movements performed more rapidly and repeated more frequently than in the case of younger children.

The flexion of knees may be augmented, as the pupils acquire command of the balance, until they nearly sit on the heels in this position. (Fig. 32.)

### SECOND PRACTICE.

CAUTION.—*Bending and stretching one knee.*

COMMENCING POSITIONS.—“*Hands on hips, both feet—Astride,*”  
“*Neck rest, both feet—Astride,*” or “*Hands on hips, right foot two lengths—Forwards.*”

Left knee— Bend the left knee until it is vertically over the toe,  
Bend. (One.) and pointing in the same direction as the foot: at the  
same time raise the heel, the right leg being kept



LEG AND HIP MOVEMENTS, FIRST PRACTICE, "KNEES—BEND."

*(Two Classes. Ranks opened in Second Method.)*

HONEYWELL ROAD BOARD SCHOOL, LONDON, S.W.

perfectly rigid, with the foot firm on the ground, body upright, shoulders square, and eyes directed to the front. When in this position, the weight of the body should be entirely on the fore part of the left foot, so that the right could be raised from the ground if desired. (Fig. 33.)

- Left knee— Straighten the knee and lower the heel, still  
Stretch. keeping the right knee rigid.  
(Two.)  
Right knee Repeat by bending the right knee.  
—Bend.  
(Three.)  
Right knee Straighten the knee and lower the heel.  
—Stretch.  
(Four.)  
Class— Drop the hands smartly and quietly to the sides  
Attention. and come to attention.

If the commencing position be “Both feet astride,” the command “Change” may be given when in the position of “Right knee bend.” Keeping the left knee straight, straighten the right knee and lower the heel, and without pause slowly bend the left knee, raising the heel, thus resuming the first position. The head and trunk are to remain erect throughout.

If the right foot has been carried forward as a commencing position, give the command “Feet—Change” before bending and stretching the right knee.

### THIRD PRACTICE.

CAUTION.—*Astride leaping.*

COMMENCING POSITION.—“*Hands on—Hips.*”

Class— Spring to the “Astride” as in “Commencing  
Commence. positions,” and immediately spring to the commencing position again, the knees slightly bent, and the heels clear of the ground throughout, trunk erect, and the toes turned out at the same angle as when at attention. Continue these leaps by light springing movements, at the same cadence as the “Quick march” (S. 9), judging the time. (Plate 9.)

Class— On the command “Steady,” which should be given  
Steady. as the feet are closed, repeat the two movements, lower the heels, and straighten the knees.



FIG. 33.



FIG. 34.



FIG. 35.



FIG. 36.



FIG. 37.



FIG. 38.



FIG. 39.



FIG. 40.



FIG. 41.





Class— Drop the hands smartly and quietly to the sides.  
 Attention.

This practice may be varied by introducing the First Practice of the "Arm raising and swinging," raising the arms as the feet are carried astride, and lowering them as the heels are being closed. When this is done the exercise may be classed as coming under the next group.

*Leg and hip movements*:—The muscles of the legs and thighs and around the ankle-joints are those chiefly employed ; while the effort to maintain the equilibrium of the body causes a number of muscles, principally in the loins and waist, to be exerted in a marked degree. The muscles of the upper back and neck are also powerful aids in maintaining the balance ; hence these exercises can be classed as "Balance movements." With "Arm raising or lowering," respiration and circulation are greatly augmented. "Bending one knee" causes more effort to be made than when both are bent, and at the same time the under thigh of the straight or the advanced leg is exercised. This latter exercise is important, as there are but few movements in exercises without apparatus where this important group of muscles is brought prominently into play. "Astride leaping" is a valuable exercise for the lower limbs ; but it must not be too prolonged, as it acts powerfully on the respiratory organs, and speedily produces breathlessness ; neither should it be practised with dumb-bells, unless they are placed on the hips.

## LEG, HIP, AND ARM MOVEMENTS.

### FIRST PRACTICE.

CAUTION.—*Knees bending with arms sideways raising.*

Heels—Raise. As directed in "Commencing positions."  
 (One.)

Knees—Bend. As in "Leg and hip movements," raising the  
 (Two.) arms sideways to the horizontal line, palms facing downwards. (Fig. 34.)

Knees— As in "Leg and hip movements," lowering the  
 Stretch. arms to the side.  
 (Three.)

Heels— As directed in "Commencing positions"  
 Lower.  
 (Four.)



Revised Edition 1912

LEG, HIP, AND ARM MOVEMENTS, THIRD PRACTICE, "TWO."

(Class dressed at body interval. Ranks opened in Second Method. A fifth rank on the left of the class has been added (towards)

HONEYWELL ROAD BOARD SCHOOL, LONDON, S.W.

## SECOND PRACTICE.

CAUTION.—*Knees bending with arms sideways lowering.*

COMMENCING POSITION.—“*Arms upwards—Stretch.*”

Heels-Raise. As in First Practice.  
(One.)

Knees-Bend. As in First Practice, lowering the stretched arms to  
(Two.) the horizontal line, right and left, palms upwards.

Knees— As in First Practice, raising the arms to the vertical  
Stretch. position. (Fig. 16.)  
(Three.)

Heels— As in First Practice.  
Lower.  
(Four.)

Class— Lower the arms sharply to the “Upwards bend”  
Attention. position; make a pause, then stretch them to the  
sides.

## THIRD PRACTICE.

CAUTION.—*Knees bending with arms sideways and upwards raising.*  
One.

Raise the heels, as in First Practice, at the same time raise the arms sideways to the horizontal line, palms turned downwards.

Two. Slowly bend the knees as in “Two,” First Practice, at the same time raise the arms vertically over the shoulders, rotating them outwards as they ascend, palms turned inwards. (Plate 17.)

Three. Slowly stretch the knees, and lower the arms sideways to the horizontal line with the palms turned upwards.

Four. Lower the heels, and by rotating the arms inwards lower them to the sides.

This practice may be varied by raising the heels, bending the knees, and raising the arms sideways on the word “One”; straightening the knees, and raising the arms upwards on the word “Two”; bending the knee and lowering the arms sideways on the word “Three,” and straightening the knees with simultaneous lowering of the arms and heels on the word “Four.”

The movements in the foregoing practices may be performed with increased rapidity as the pupils acquire such command of the body as will enable them to readily maintain its equilibrium.

## LUNGING. (PLATE 18.)

### FIRST PRACTICE.

CAUTION.—*Side lunging.*

COMMENCING POSITIONS.—“*Hands on—Hips,*” or “*Neck—Rest.*”

Right side— Keeping the left leg straight and the foot firm and  
Lunge. flat on the ground, carry the right foot about three  
(One.) lengths to the right, measuring from heel to heel,  
and turned out at the same angle as when at  
attention. As the right foot meets the ground, bend  
the knee outwards over the toe until the thigh and  
leg form a right angle, trunk erect, shoulders square  
to the front, and right foot firm and flat on the  
ground. (Fig. 35.)

Class— Press firmly on the right foot and spring smartly to  
Recover. the commencing position, the left leg remaining  
(Two.) straight throughout.

Repeat to the left, reversing the above directions. (Fig. 36.)

Class— Drop the hands smartly and quietly to the sides.  
Attention.

If the command “Attention” be given when at the “Lunge,” close the heels smartly, as directed in “Recover,” and drop the hands to the sides.

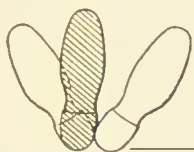
When in the position of “Left side lunge” the command “Change” may be given. Recover as above directed, and after a slight pause lunge to the right.

When the above can be executed correctly, by words of command or numbers, the class should be instructed to lunge, and after a slight pause, but without further word of command, to return to the commencing position, the command being “Recovering, right (left) side—Lunge.”

# LUNGING



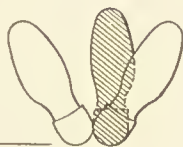
FIRST PRACTICE, RIGHT SIDE—LUNGE



THIRD PRACTICE, RIGHT—LUNGE



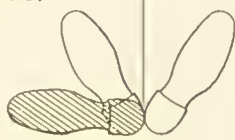
THIRD PRACTICE, LEFT—LUNGE



SECOND PRACTICE, READY  
BY NUMBERS, TWO.



THIRD PRACTICE,  
LEFT FOOT TO THE FRONT  
— LUNGE.



THIRD PRACTICE,  
RIGHT FOOT TO THE FRONT  
— LUNGE.



SECOND PRACTICE.  
ENGAGE.



READY BY NUMBERS,  
THREE.



SECOND PRACTICE.  
— LUNGE.

## SECOND PRACTICE.

CAUTION.—*Direct lunging from the engage.—Ready by numbers.*

- One. Place the hands on the hips as in “Commencing positions.”
- Two. Make a partial turn to the right by raising the toes and turning on the heels, so that the right foot points to the right, head erect, elbows and shoulders pressed back, the chest advanced, and the eyes directed to the original front.
- Three. Raise the left foot and bring the back of its heel against the inside of the right, thus placing the feet at right angles to each other. (Fig. 37).

CAUTION.—*Engage by numbers.*

- One. Carry back the right foot about two lengths, the body equally balanced upon both feet, the heels in line with each other, and both legs straight. (Fig. 38).
- Two. Bend both knees, forcing them well apart, left knee directly over the instep, right knee over the toes. Trunk erect, and hips pressed to the front. (Fig. 39).
- Three. Raise the left foot and beat it smartly on the ground.

When the positions have been correctly learned by numbers, they should then be practised judging the time, the commands being “Ready,” and “Engage,” care being taken that the three movements are distinctly and separately shown in both.

Left leg—  
Lunge. Carry the left foot about two lengths forwards, straightening the right leg and pressing the right hip forwards, the left knee perpendicular to the instep, right foot flat upon the ground, the trunk and head erect. (Fig. 40).

Class—En-  
gage. Return to the “Engage” by bending the right knee, and bringing back the left foot.

About—  
Turn. By one quick movement raise the toes and reverse the position of the legs by turning about to the right on the heels, keeping both knees bent, and lower the toes to the ground.



- Class— As directed above, but lunging with the right foot.  
 Lunge.  
 Class— As directed above, but substituting left for right.  
 Engage.  
 About— As directed above, but substituting left for right.  
 Turn.  
 Class— Straighten the knees and bring the right heel to the  
 Ready. left, thus resuming the "Ready" position. (Fig. 37.)
- Class— Turn to the front on the right heel, bring the left  
 Front. foot back to its former position, drop the hands to the  
 sides, and come to attention.
- Turning about should also be practised in the "Lunge" position.

### THIRD PRACTICE.

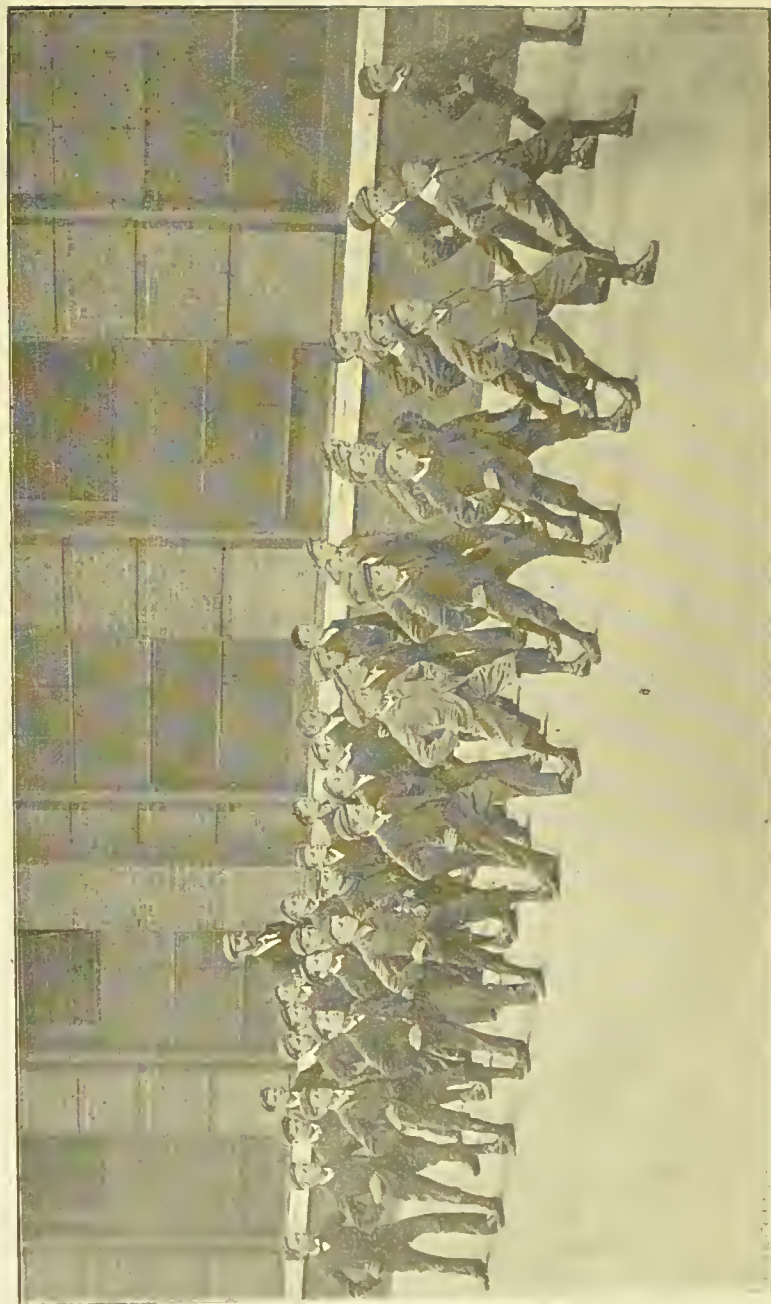
CAUTION.—*Direct lunging in one movement.*

COMMENCING POSITION.—"*Hands on—Hips.*"

- Right— Keeping the left knee straight, pivot on the left  
 Lunge. heel so that the toes are pointing to the front, and  
 lunge direct to the right, looking in that direction,  
 thus in one movement assuming the position of  
 "Lunge," Second Practice.
- Class— As in First Practice, pivoting on the left heel to the  
 Recover. front during the movement.
- Front— Make a partial turn to the left on the left heel and  
 Lunge. lunge to the front with the right foot.
- Class— As before, pivoting on the left heel to the front  
 Recover. during the movement.
- Left— Lunge to the left, reversing the directions given in  
 Lunge. "Right lunge." (Fig. 40.)
- Class— As before, bringing the left foot to the right, and  
 Recover. pivoting on the right heel to the front during the  
 movement.
- Class— Drop the hands smartly and quietly to the sides.  
 Attention.

Repeat the above, commencing to the left, in which case the left

PLATE 19.



LUNGING, THIRD PRACTICE, "FRONT—LUNGE."  
(Class dressed at half interval. Ranks opened in First Method.)  
COBOURG ROAD BOARD SCHOOL, LONDON, S.E.

foot is used when lunging to the front, the partial turn being made to the right on the right heel. (Plate 19.)

The remarks respecting the "Recovering lunge" in the First Practice apply in the above instance.

*Lunging*:—These movements have the same effect, or nearly so, as the "Leg and hip movements," except that in these instances all the muscles, &c., engaged, are more forcibly employed, especially when in the act of lunging. Although they are valuable exercises in themselves, their chief use is to teach and ensure a correct position, this being highly essential, as lunging is extensively used in most of the advanced exercises. These practices being simply preparatory do not necessitate the use of dumb-bells, and should therefore be performed solely as free movements.

## SIDE LUNGING WITH ARM MOVEMENTS.

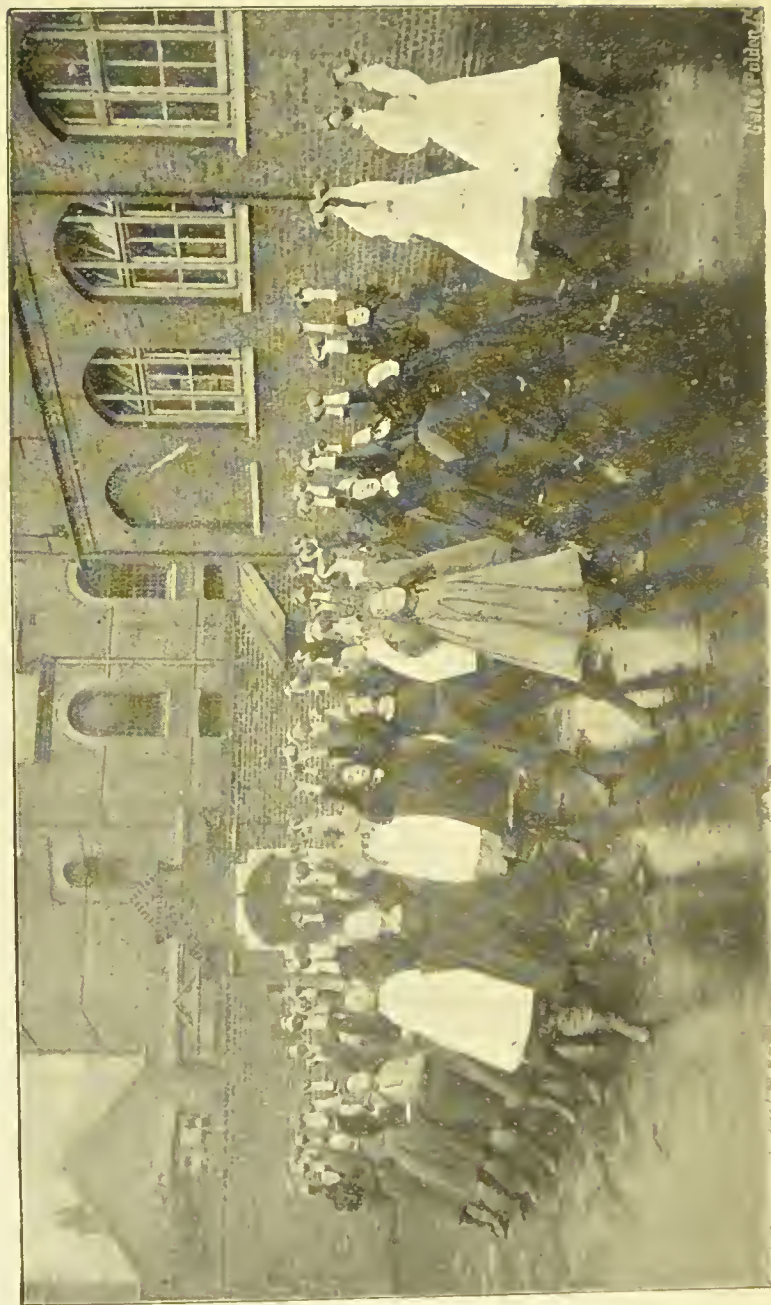
### FIRST PRACTICE.

CAUTION.—*With arms sideways raising.*

Right (Left) As directed in "Lunging," First Practice, raising side-Lunge. the arms smartly as in "Arms raising and swinging," (One.) First Practice. (Fig. 41.)  
Class—  
Recover. As directed in "Lunging," First Practice, lowering (Two.) the arms smartly to the sides.

When in the position of "Left side lunge," the command "Change" may be given. Proceed as directed in "Lunging," First Practice, lowering the arms as the heels are being closed, and raising them when lunging in the opposite direction. On the command "Attention," which may be given when on either lunge, proceed as directed in "Recover."

This practice may be varied by introducing the Fourth Practice of the "Arm raising and swinging" with the lunging movement, the eyes being directed upwards when on the lunge. It may be further varied by lunging as directed; raising the arms sideways until they arrive vertically over the shoulders, eyes directed upwards, as a second movement, palms facing inwards; lowering the arms to the horizontal line as a third movement, palms facing downwards; and lowering the arms, and recovering as a fourth movement. (Plate 20.)



SIDE LUNGING WITH ARM MOVEMENTS, FIRST PRACTICE, "LEFT SIDE—LUNGE."

(Chosen dressed at half interval. Ranks opened in Second Method.)

BELENDES ROAD BOARD SCHOOL, LONDON, S.E.



## SECOND PRACTICE.

CAUTION.—*With arms lowering.*COMMENCING POSITION.—*Arms upwards—Stretch.*

Right (Left) As in First Practice, lowering the stretched arms to side-Lunge. the horizontal line right and left, with the palms turned (One.) upwards.

Class— As in First Practice, raising the arms to the Recover. “Commencing position.” (Fig. 16.) (Two.)

When in the position of “Left side lunge,” the command “Change” may be given. Proceed as directed in “Lunging,” First Practice, raising the arms as the heels are being closed, and lowering them again on the “Lunge.” On the command “Attention,” which should be given when at the “Recover,” stretch the arms to the sides in two movements.

## THIRD PRACTICE.

CAUTION.—*With arms stretching.*COMMENCING POSITION.—*Arms upwards—Bend.*

Right (Left) As directed in “One,” First Practice, at the same side-Lunge. time stretching the arms outwards as directed in (One.) “Arms bending and stretching,” First Practice. (Plate 21.)

Class— As directed in First Practice, bringing the arms Recover. smartly to the “Upwards bend” position. (Two.)

This practice may be varied by substituting the “Upwards stretch” for the outwards one.

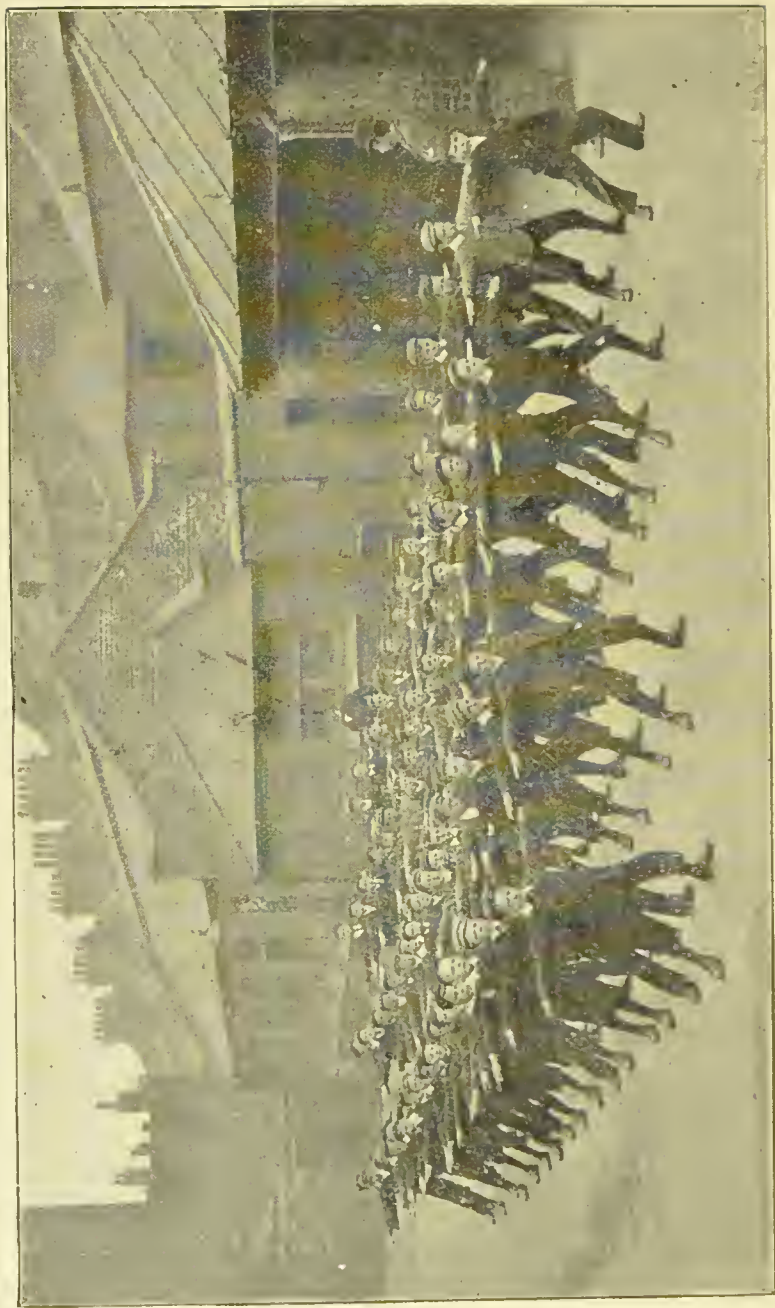
When in the position of “Left side lunge” the command “Change” may be given. Proceed as directed in “Lunging,” First Practice, bending the arms as the heels are being closed, and stretching them again on the lunge.

On the command “Attention,” which should be given when at the “Recover,” stretch the arms to the sides.

## FOURTH PRACTICE.

CAUTION.—*With arms sideways raising and trunk bending.*

Right side— As directed in “One,” First Practice. Lunge. (One.)



SIDE LUNGING WITH ARM MOVEMENTS, THIRD PRACTICE, "LEFT SIDE—LUNGE."

*(Ranka opened in Third Method.)*

BATTESEA PARK BOARD SCHOOL, LONDON, S.W.



Trunk to the right— Keeping the arms stretched, fingers straight, and feet firm on the ground, bend the trunk smartly to the right until the finger points of the right hand touch the toes, the left arm vertical over the left shoulder, head turned to the left, and eyes directed to the back of the left hand. (Fig. 42.)  
 Bend.  
 (Two.)

Trunk up- Keeping the arms straight and square with the shoulders, raise the trunk smartly to the position of "One."  
 wards—  
 Stretch.  
 (Three.)

Class— As directed in First Practice.  
 Recover.  
 (Four.)

Repeat to the left, reversing the above directions.

## DIRECT LUNGING WITH ARM MOVEMENTS.

### FIRST PRACTICE.

CAUTION.— *With oblique arms stretching.*

COMMENCING POSITION.— *Arms upwards— Bend.*

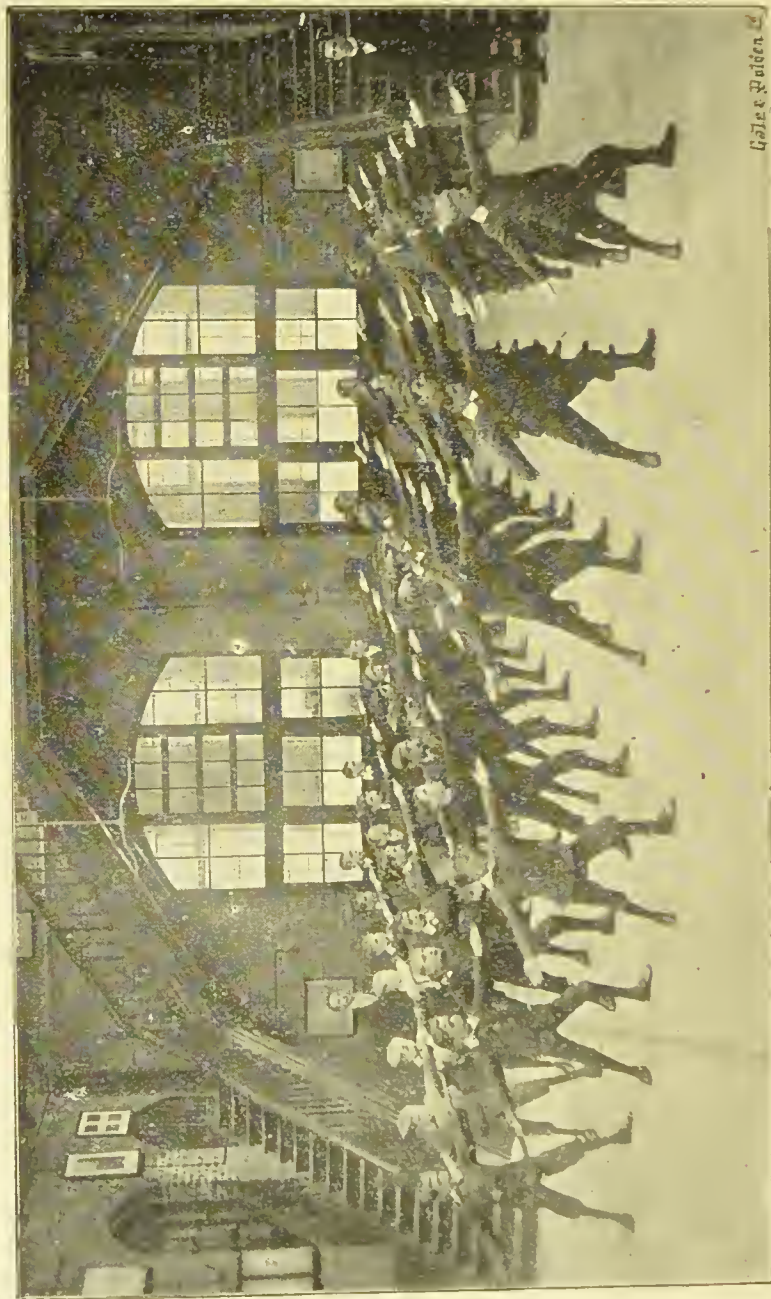
Right— Lunge smartly to the right, keeping the left foot firm and flat on the ground, the left leg straight, right lower leg perpendicular, knee over the instep, trunk upright. Throw the right hand well out to the right in line with the forehead, left hand to the left in line with the hip, both arms straight, palms turned upwards, eyes directed to the right hand. (Fig. 43.)  
 Lunge.

Class— Spring strongly off the right foot, and, without allowing the left leg to bend, assume the commencing position.  
 Recover.

Left— Repeat the "Lunge," substituting left for right.  
 Lunge. (Plate 22.)

Class— As directed above.  
 Recover.

Class— Stretch the arms smartly and quietly to the sides.  
 Attention.



Giles & Patten.

DIRECT LUNGING WITH ARM MOVEMENTS, FIRST PRACTICE, "LEFT-LUNGE."

*(Two Classes, Ranks opened in Fourth March.)*

CRAWFORD STREET BOARD SCHOOL, LONDON, S.W.

When in the position of "Left lunge," the command "Feet and arms—Change" may be given. Spring smartly to the "Recover" as above directed, and after a slight pause repeat the movements to the right.

## SECOND PRACTICE.

CAUTION.—*With trunk and arm movements.*

Right—  
Lunge.  
(One.)

Place the left hand on the hip, and, keeping the left knee straight, lunge to the right, as in "Lunging," Third Practice, the right lower leg perpendicular, the knee over the instep, the body turned well to the right and bent from the hips backwards, the right hand swung over the shoulder as in First Practice, "Trunk and arm movements," head thrown back, and eyes directed to the hand. (Plate 23.)

Class—  
Recover.  
(Two.)

Without bending the leg, bring the right heel to the left, swing the right arm outwards to the side, drop the left hand, and come to attention as directed in "Lunging," Third Practice.

Front—  
Lunge.  
(One.)

Make a partial turn to the left on the left heel, and lunge to the front with the right foot, as in "Lunging," Third Practice, swinging both arms to the front until they arrive vertically over the shoulders, palms to the front. (Plate 24.)

Class—  
Recover.  
(Two.)

As before, but in bringing the hands to the sides, swing them well to the rear over the shoulders with a semi-circular sweep as in the Sixth Practice of the "Arms raising and swinging," and come to attention, turning on the left heel to the front, the arms remaining straight throughout.

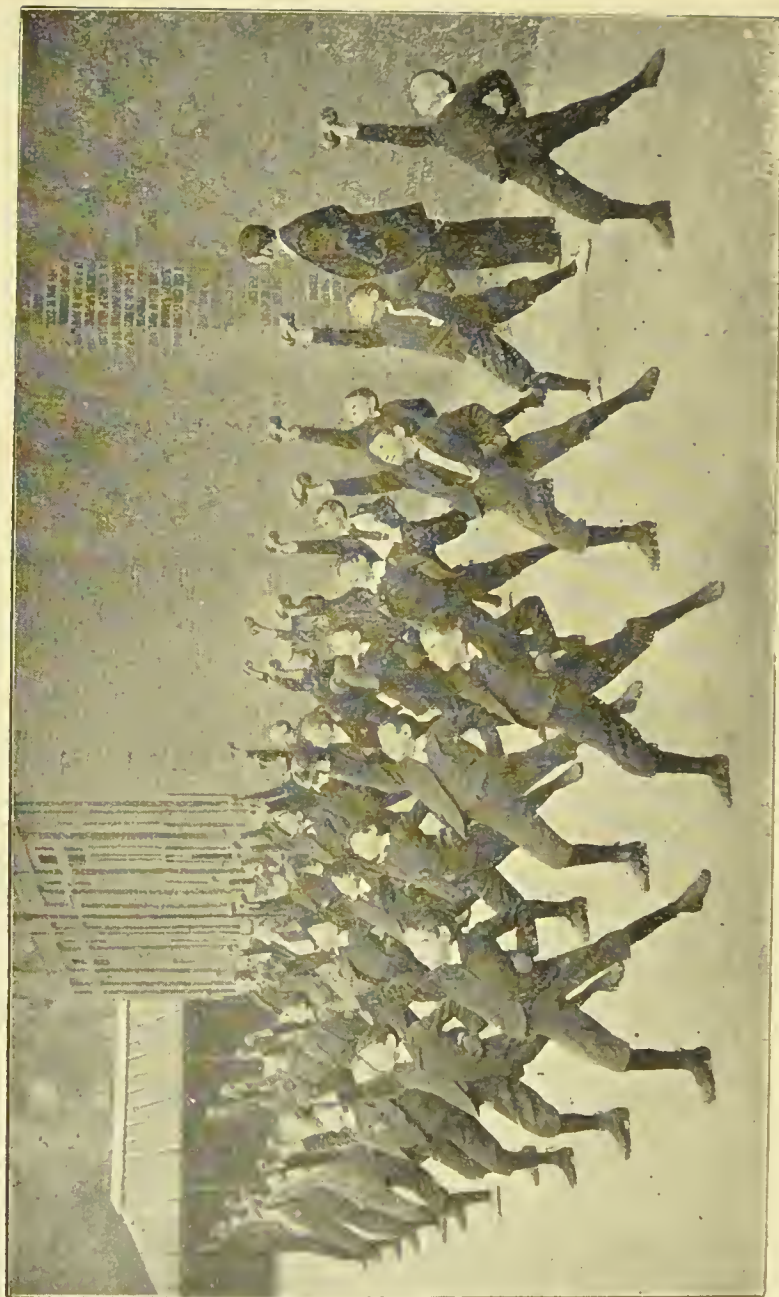
Left—  
Lunge.  
(One.)

Place the right hand on the hip, and lunge to the left, thus reversing the position of the trunk and limbs as directed in "Right lunge."

Class—  
Recover.  
(Two.)

Bring the left heel to the right and come to attention.

Repeat the above, commencing to the left, in which case the



DIRECT LUNGING WITH ARM MOVEMENTS, SECOND PRACTICE, "RIGHT--LUNGE."  
(Class dressed at half interval. Ranks opened in *Third Method*.)  
LYNDHURST GROVE BOARD SCHOOL, LONDON, S.E.



left foot is used when lunging to the front, the partial turn being made to the right on the right heel. (Figs. 44 and 45.)

After a class has attained proficiency in performing the various lunges by word of command or numbers, the movements should be practised judging the time, *e.g.*, on the command "Recovering, right—Lunge," lunge as directed, and after a slight pause, recover. They may also be practised as a combination, judging the time, the command being "Right (left)—Commence." The command "Steady," must be given on recovering from the left (right) lunge; or the command "Change" may be substituted when the lunges will be repeated, commencing in the opposite direction.

As a combination, the remarks made regarding the "Trunk and arm movements" apply in this instance.

*Side and direct lunging with arm movements*:—These combine the various "Arms raising and swinging," "Arms bending and stretching," and "Head and trunk movements"; while the simultaneous action of "Lunging" brings into play a great number of muscles situated in the abdomen and lower limbs—thus bringing into vigorous practice nearly all the previous movements.

The following music has been specially arranged with a view to its application to "Direct lunging with arm movements," Second Practice, but it may be used for other exercises either singly or in combination.



DIRECT LUNGING WITH ARM MOVEMENTS, SECOND PRACTICE, "FRONT—LUNGE."

*(Class dressed at half interval. Ranks opened in Third Method.)*

WHITEHILL PUBLIC SCHOOL, DENNISTOWN, GLASGOW.



# Direct Lunging with Arm Movements.

*Second Practice as a combination.*

Right. 1 2      Front. 1 2      Left. 1 2      Right. 1 2

Bring the good old bu-gle, boys, we'll sing an-o-ther song—

Front. 1 2      Left. 1 2      Right. 1 2      Front. 1 2

Sing it with a spi-rit that will start the world a-long—

(Change.) Left. 1 2      Front. 1 2      Right. 1 2      Left. 1 2

Sing it as we used to sing it, fif-ty thou-sand strong,

Front. 1 2      Right. 1 2      Left. 1 2      Front. 1 2

While we were march-ing through Geor-gia.

## BALANCE MOVEMENTS.

## FIRST PRACTICE.

CAUTION.—*Leg sideways raising.*COMMENCING POSITIONS.—“*Hands on—Hips,*” or “*Neck—Rest.*”

Right (Left) Keeping the leg nam.d perfectly straight, raise it  
 leg sideways outwards and upwards as far as possible, without dis-  
 —Raise. turbing the vertial position of the trunk, toe pointed,  
 (One.) the stationary leg kept perfectly rigid, and the foot  
 firm and flat on the ground. (Fig. 46.)

Right (Left) Keeping the leg straight, lower it to the original  
 leg—Lower. position.  
 (Two.)

Class— Drop the hands to the sides.  
 Attention.

When the leg is raised, the command “Change” may be given; the raised leg will then be lowered, a pause made, and the other one raised. On the command “Attention,” close the heels smartly, and drop the hands to the sides.

The above may be accompanied with “Arms sideways raising,” the arms being raised at “One,” and lowered at “Two.”

## SECOND PRACTICE.

CAUTION.—*Leg forwards and backwards swinging.*COMMENCING POSITION.—“*Hands on—Hips.*”

Right (Left) On the word “Swing” or “One,” without disturb-  
 leg forwards ing the position of the body, swing the right leg as  
 —Swing. high as possible to the front, knee straight and toe  
 (One.) pointed (Fig. 47.)

Right (Left) Still keeping the leg straight and toe pointed, swing  
 leg back- it as far as possible straight to the rear, raising the  
 wards— toe slightly to clear the ground, the left leg and foot  
 Swing. to remain firm as the right one is swung to the front  
 (Two.) and rear. (Fig. 48.)

FIG. 42.

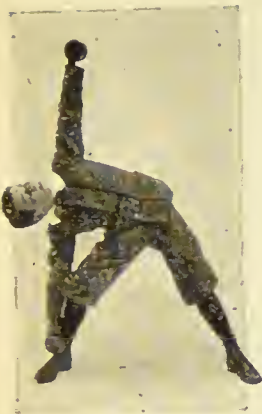


FIG. 43.



FIG. 44



FIG. 45.



FIG. 46.



FIG. 47.



FIG. 48.



FIG. 49.



FIG. 50.



Class— On the command “Attention”—which should be  
 Attention. given when the leg is to the rear—close the heels, and drop the hands smartly to the sides.

When at “Two,” the command “Change” may be given; the raised leg will then be lowered to attention, and, after a slight pause, the opposite one carried to the rear.

### THIRD PRACTICE.

CAUTION.—*Circular swinging.*

COMMENCING POSITIONS.—“*Hands on—Hips*” or “*Neck—Rest.*”

Right (Left) As directed in “One,” Second Practice. (Fig. 47.)  
 leg forwards  
 —Swing.  
 (One.)

Outwards— Keeping the leg straight and well raised, carry it  
 Circle. outwards by a circular movement until the toe is  
 (Two.) pointing straight to the right as in “One,” First Practice. (Fig. 46.)

Backwards— Continue the circular movement until the toe is  
 Circle. pointing straight to the rear as in “Two,” Second  
 (Three.) Practice. (Fig. 48.)

Class— Bring the right heel smartly to the left, and drop  
 Attention. the hands sharply to the sides.  
 (Four.)

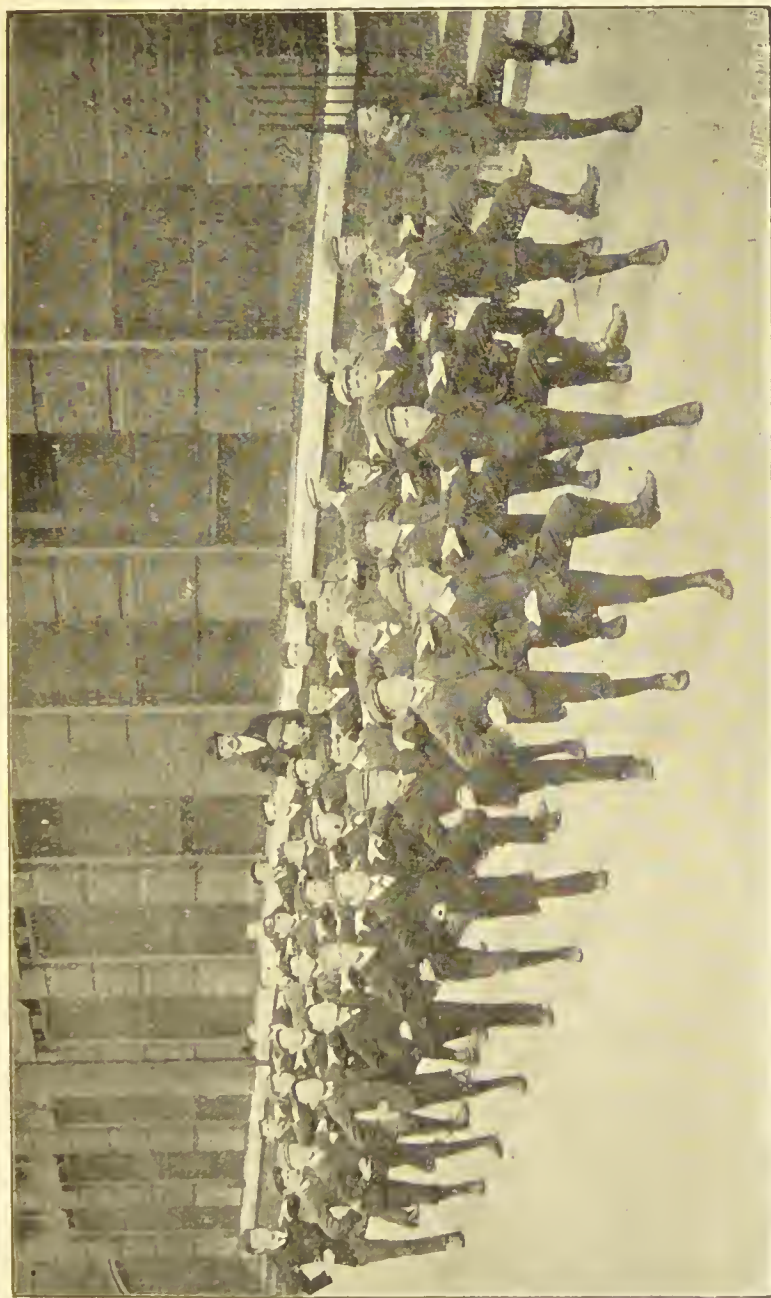
During these movements the chest is to be kept square to the front, the trunk erect, and as steady as possible.

### FOURTH PRACTICE.

CAUTION.—*Knee raising with leg stretching and foot movement.*

COMMENCING POSITIONS.—“*Hands on—Hips*” or “*Neck—Rest.*”

Right (Left) On the word “Raise” or “One,” bend the knee  
 knee— sharply upwards until the thigh is at right angles  
 Raise. with the trunk, the knee turned outwards in the  
 (One.) direction to which the toe was pointing in the commencing position, toe raised, trunk erect, and chest square to the front. (Plate 25.)



BALANCE MOVEMENTS, FOURTH PRACTICE (WITH ASSISTANCE), "LEFT KNEE—RAISE."

*(Banks opened in First Method, etc. a number one pace forwards.)*

COBOURG ROAD BOARD SCHOOL, LONDON, S.E.



Right (Left) Stretch the leg and foot sharply in the direction in leg—Stretch. which the toe was pointing in the commencing (Two.) position, the thigh and leg forming an oblique straight line, and the toe well raised from the ground.

Right (Left) As directed above in "One."  
knee—Raise.

(Three.)

Class— Lower the foot sharply, close the heels, and drop the  
Attention. hands to the sides.

(Four.)

When at "One," the caution "Foot movement" may be given. On the command "Heel—Raise," still keeping the thigh horizontal, raise the heel of the raised foot, and depress the toe. (Fig. 49). On the command "Heel—Lower," raise the toe and depress the heel. On the command "Feet—Change," lower the foot smartly, close the heels, and, after a slight pause, raise the opposite knee, and repeat the foot movement.

The foregoing practices may also be executed with assistance as follows :—

The class should be opened out as in the Second method (S. 19, Part I.), and the even numbers directed to take one pace forwards, or the class may be turned to the original front. On the command "With assistance—Ready," all except those on the right and left of each rank will raise both arms sideways in line with the shoulders, and take hold of each other's arms for mutual support, those on the right and left raising the inner arm only, placing the outer hand on the hip ; or the hands may be clasped by raising the arms sideways and obliquely upwards, the elbows being kept perfectly rigid, and the chest well advanced. On the command "Attention," drop the hands smartly to the sides. (Plate 25).

*Balance movements* :—These increase the balancing power, and the ready response of the muscles to the commands of the will. The lower limbs especially are strengthened, rendered supple and elastic, while at the same time the muscles of the loins, back, chest, abdomen and neck are brought into play in retaining the erect position. The effort to retain the balance and the upright position of the body brings into action many muscles, and is one of the aims of the exercise. The movements sideways, forwards, backwards, &c., necessitate the co-operation of the muscles all round and from all parts of the hips ; while the leg, apparently kept immovable, is most actively employed in maintaining the equilibrium of the body.



## SHOULDER MOVEMENTS.

---

### FIRST PRACTICE.

CAUTION.—*Flexion and extension of the arms sideways.*

- One. Raise the arms sideways in line with the shoulders, elbows well to the rear, fore-arms bent, hands tightly clenched, the thumb points resting on the shoulders, backs of the hands upwards. (Fig. 50).
- Two. Keeping the upper arms level with the shoulders, extend the fore-arms sharply outwards right and left, straightening the fingers, backs of the hands downwards.
- Class—  
Attention. Keeping both arms straight, swing them sharply downwards to the sides.

### SECOND PRACTICE.

CAUTION.—*Flexion and extension of the arms forwards and backwards.*

- One. Keeping both arms straight, swing them to the front until they are in line with the shoulders and parallel with each other, palms facing inwards, fingers pointing straight to the front. (Fig. 15).
- Two. Clench the hands, draw the elbows as far as possible to the rear by bending the arms, fore-arms horizontal, close to the body, parallel with each other, and as low as the waist, backs of the hands outwards. (Fig. 51).
- Class—  
Attention. Drop the hands the nearest way to the sides.

### THIRD PRACTICE.

CAUTION.—*Alternate flexion and extension of the arms on the lunge.*

- Class—  
Ready. Bend the arms and assume the position of "Two," Second Practice.

Right— Lunge to the right as directed in Lunging. Third  
Lunge. Practice, and strike out freely from the shoulder in  
(One.) that direction with the left fist, the shoulder forced  
well forward, back of the hand outwards, head erect.

Two. Draw the left arm sharply back to its former position  
—forcing the shoulder and elbow well to the rear—at  
the same time strike out with the right fist, shoulders  
nearly square to the original front. (Plate 26.)

Class— Recover from the “Lunge,” and bring the arms to  
Recover. the “Ready” position.

Practise by lunging to the left, in which case the first move-  
ment is made with the right fist. (Fig. 52.)

Class— Drop the hands smartly to the sides and straighten  
Attention. the fingers. If from the position of “Lunge,” spring  
to the “Recover,” and at the same time drop the  
hands smartly to the sides.

#### FOURTH PRACTICE.

CAUTION.—*Simultaneous flexion and extension of the arms  
on the lunge.*

Class—Ready. As directed in the Third Practice.

Right (Left) Lunge to right (left), and strike out freely in that  
—Lunge. direction with both fists, backs of the hands outwards.  
(One.) (Fig. 53.)

(Two.) Withdraw the arms, forcing the elbows well to the  
rear, fore-arms horizontal, and as low as the waist.  
the backs of the hands outwards, care being taken  
that the body remains steady during the movement.

Class— As directed in Third Practice.  
Recover.

Class— As directed in Third Practice.  
Attention.

N.B.—The above four practices may be combined by using the  
following commands:—

CAUTION.—*Second Practice (to be given when at “Two,”  
First Practice).*

One. Swing both arms to the front, until they are in line  
with the shoulders and parallel to each other.

Two. As directed in Second Practice.



SHOULDER MOVEMENTS, THIRD PRACTICE, RIGHT LUNGE, "TWO."  
(Ranks opened in *Third Method*.)  
WHITEHILL PUBLIC SCHOOL, DENNISTOWN, GLASGOW.

CAUTION.—*Third Practice (to be given when at "Two," Second Practice).*

One. As directed in Third Practice.

Two. As directed in Third Practice.

CAUTION.—*Fourth Practice (to be given when at "One," Third Practice).*

One. Withdraw the advanced arm—thus having both arms at the "Ready" position, turn about on both heels as directed in "Lunging" Second Practice, and at the same time strike out in the opposite direction with both fists.

Class— As directed in Fourth Practice.  
Attention.

These practices may also be combined, judging the time, by substituting the word "Change" for the above cautions.

As a combination, the remarks made regarding the "Trunk and arm movements" apply in this instance.

The following music has been specially arranged with a view to its application to the first four practices of "Shoulder movements," but it may be used for other exercises either singly or in combination.

## Shoulder Movements.

*First four practices as a combination.*

## 1st PRACTICE.

To the Lords of Con-ven-tion 'twas Cla-ver-house spoke; Ere the

King's crown go down there are crowns to be broko! Then each ca-va-lier who loves

honour and me, Let him fol-low the bonnets of Bonnie Dundee! Come

## 2nd PRACTICE.

fill up my cup, come fill up my can, Come sad-dle my horses and

call out my men; Un-hook the west port and let us gae free, For it's



up wi' the bon - nets of Bon - nie Dun - dee!...

## 3rd PRACTICE.

The sun is setting o'er the distant hill—Who's that a - calling? The

flow'rs are nodding and all is still—Who's that calling so sweet? The

## 4th PRACTICE.

herds are home and the birds at rest—Who's that a - call-ing? 'Tis a

soft sweet sound that stirr'd my breast—Who's that call-ing so sweet?

If preferred, either of the above Tunes can be used for the *whole* combination by simply repeating.

## FIFTH PRACTICE.

CAUTION.—*Alternate flexion and extension of the arms sideways, with head turning.*

- One. Bend the right arm as in First Practice, raise the left arm sideways, level with the shoulder, palms turned upwards, fingers straight, and at the same time turn the head to the left, directing the eyes to the extended hand. (Plate 27.)
- Two. Bend the left arm, closing the fist, and extend the right, straightening the fingers, thus reversing the above position, turning the head to the right.
- Class—  
Attention. Keeping the extended arm rigid, drop both arms the nearest way to the sides, turning the head to the front.

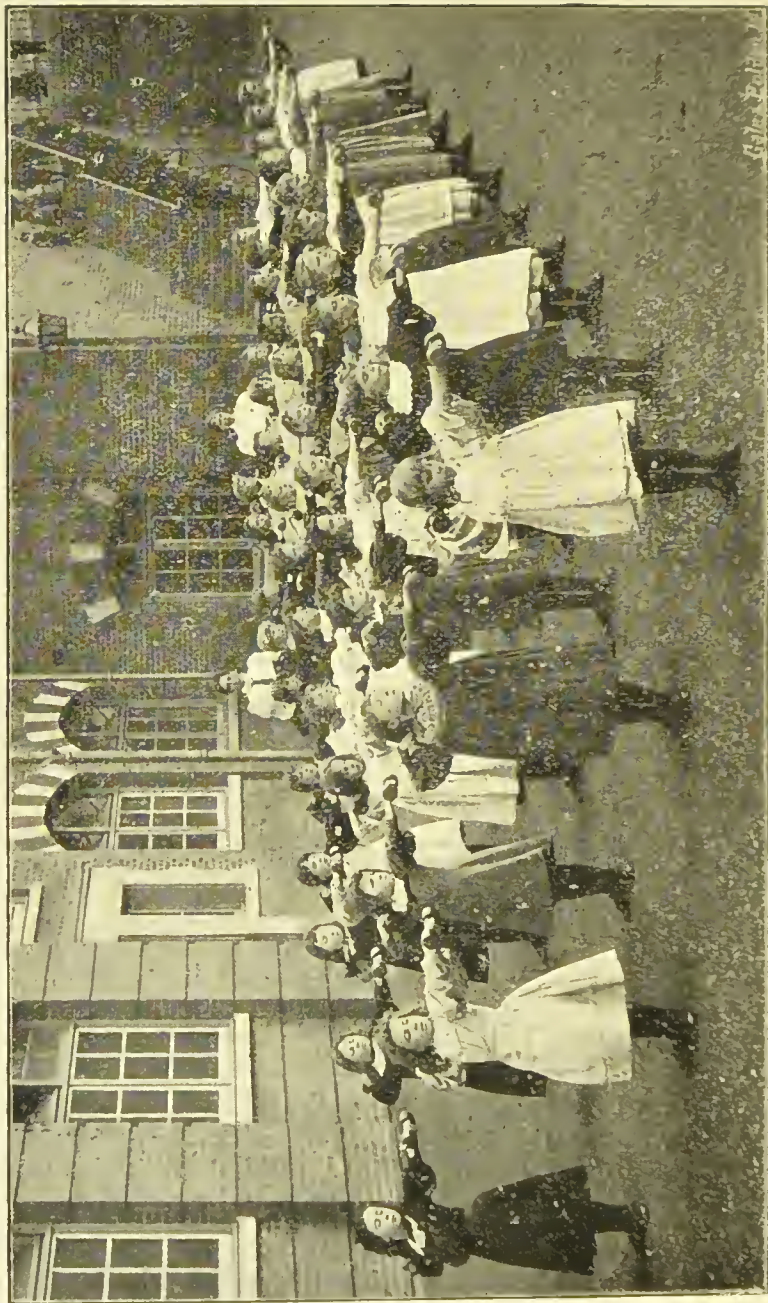
## SIXTH PRACTICE.

CAUTION.—*Arms raising with foot movements.*

- One. As directed in "Arms sideways raising."
- Two. Keeping the arms straight, rotate them outwards, thus turning the palms upwards.
- Three. Still keeping the arms straight, raise them until they are vertically over the shoulders, palms facing inwards. (Fig. 16.)
- Four. Keeping the arms straight and parallel, lower them forwards to the level of the shoulders, palms inwards, and fingers straight. (Fig. 15.)
- Five. Raise the arms upwards to the position of "Three."
- Six. Lower the arms sideways in line with the shoulders, palms upwards.
- Seven. Turn the palms downwards by rotating the arms inwards. (Fig. 18.)
- Eight. Lower the arms quietly to the sides.

At "One," "Three," "Five," and "Seven," the heels are simultaneously raised; at "Two," "Four," "Six," and "Eight," they are lowered.

Repeat, judging the time, and practice as respiratory movements.



SHOULDER MOVEMENTS, FIFTH PRACTICE, "ONE."  
(Class dressed at half interval. Ranks opened in Second Method.)

MARYON PARK BOARD SCHOOL, LONDON, S.E.

## SEVENTH PRACTICE.

CAUTION.—*Arms raising, bending, and swinging with foot movements.*

Arms for- As directed in "One," Second Practice. (Fig. 15.)  
wards—  
Raise. (One.)

Arms for- Bend the arms sharply as directed in "Arms for-  
wards-Bend. wards bend," "Commencing positions." (Fig. 8.)  
(Two.)

Upwards Raise the heels, extend the arms by throwing them  
and out- upwards over the shoulders, palms inwards, and con-  
wards— tinue the swing outwards until they are level with the  
Swing. shoulders, palms upwards, at the same time lower the  
(Three.) heels.

Arms— Keeping the arms straight, rotate them inward-  
Lower. and lower them the nearest way to attention.  
(Four.)

This practice should also be executed slowly as respiratory movements.

## EIGHTH PRACTICE.

CAUTION.—*Arms striking with foot movements.*

Arms for- As directed in "Two," Seventh Practice. (Fig. 8.)  
wards—  
Bend. (One.)

Right foot Strike the arms smartly outwards and backwards  
forwards. in a horizontal line as far as possible, palms still  
arms out- facing downwards, at the same time carry the right  
wards— foot one length forwards. (Fig. 54.)  
Strike.  
(Two.)

Arms for- Re-bend the arms, thus resuming the first position,  
wards-Bend. and bring the right foot to the left.  
(One.)

Left foot Repeat the above, carrying the left foot forwards,  
forwards, care being taken that during either foot movement  
arms out- the shoulders are retained square to the original  
wards— front.  
Strike.  
(Two.)



Feet and arms—  
Change.      Re-bend the arms, close the heels, and, after a slight pause, strike outwards again, advancing the right foot.

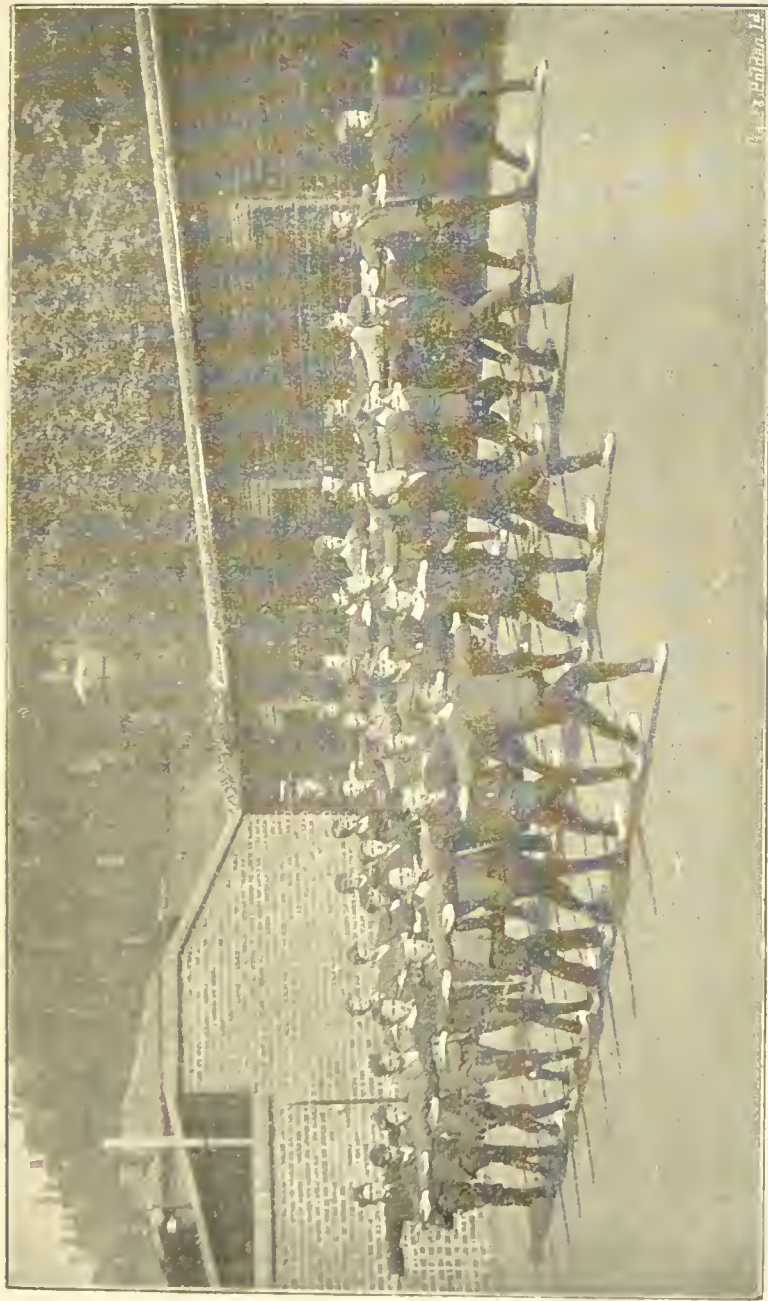
Class—  
Attention.      Close the heels, at the same time bring the arms to the "Forwards bend" position, and stretch them downwards to attention.

The foot can also be carried two lengths forwards during the striking movement, the distance being named in the cautionary part of the command.

The Sixth, Seventh, and Eighth Practices should be first taught without the foot movement.

*Shoulder movements*:—The whole of these practices act chiefly on the parts named, either when in the erect position or on the "Lunge"; at the same time exercises for the hands, wrists, fingers, fore and upper-arms, chest, &c., are introduced in the Second, Third, and Fourth Practices, thus bringing into play the same group of muscles around the shoulders which would be exercised if forwards and backwards stretching were added in the arm stretching practices, but with more marked effect. The Sixth and Seventh Practices, especially the former, strongly influence the respiration, if deep breathing be associated with the movement. The arm movements are chiefly performed by the shoulder-joints, but are also assisted by the rotation of the forearm. The heel-raising acts particularly on the parts of the legs below the knee-joints, while the muscles around the ankle-joints, and those employed in maintaining the equilibrium of the body, are extensively used. The "Arms striking" in the Eighth Practice has a somewhat similar effect as "Arms outwards stretching," except that it tends to expand the chest more forcibly, and strengthen the shoulder muscles and those that extend the arms at the elbows. When executed with foot movement, the action on the chest, &c., becomes greatly increased, while the muscles of the thighs and those surrounding the hip-joints are brought into vigorous action.





SHOULDER MOVEMENTS WITH DIRECT LUNGING, FIRST PRACTICE. "CLASS—LUNGE."

*(The exercise has been commenced to the right, and the Class is lunging to the original rear.)*

MORELAND STREET BOARD SCHOOL, LONDON, E.C.

## SHOULDER MOVEMENTS WITH DIRECT LUNGING.

## FIRST PRACTICE.

CAUTION.—*With arms extended.*Right—  
Lunge.  
(One.)

Lunge to the right as directed in “Lunging,” Third Practice, at the same time bring the arms to the “Forwards bend,” and by a circular movement, as directed in “Shoulder movements,” Seventh Practice, extend them upwards and outwards until they are in line with the shoulders, palms upwards, trunk erect and turned on the hips in the direction of the lunge.

Two.

Keeping the arms well stretched, trunk and head erect, and both feet firm and flat on the ground, bend the right knee by pressing the hips forwards, until it is over the toes, and, without a pause, return to the position previously assumed.

Three.

Recover from the lunge, and by turning partially to the right on the left heel, and swinging the arms horizontally forwards, come to the position of “One,” “Shoulder movements,” Second Practice, but with the finger points of the stretched hands meeting, trunk erect, and shoulders square with the direction in which the hands are pointing, and the eyes looking in the same direction.

Four.

Raise the toes and make a partial turn to the right on both heels, the trunk turned in that direction, arms still extended and following the movement of the body, fingers and right foot pointing straight to the original rear.

Class—  
Lunge.

Lunge straight in the direction in which the right foot is pointing, extending the arms outwards by a circular movement as before, and repeat “Two,” “Three,” and “Four.” (Plate 28.)

Two more lunges will bring the class facing to the original front. After recovering from the fourth lunge, the arms are to be swung downwards to attention on the word “Four.”

Repeat the exercise, commencing to the left, the lunges being made with the left foot. (Fig. 55.)

## SECOND PRACTICE.

CAUTION.—*With arms striking.*

- Right—  
Lunge.  
(One.)      Lunge to the right as directed in the First Practice ; at the same time bend the arms and strike them outwards right and left as in “Shoulder movements,” Eighth Practice, palms downwards, trunk erect and turned square in the direction of the lunge.
- Two.      As in “Two,” First Practice, but on resuming the previous position after bending the knee over the toes, rotate the arms, thus turning the palms upwards.
- Three.      Recover as directed in the First Practice, facing in the direction of the previous lunge, the arms being simultaneously brought to the “Forwards bend” position. (Fig. 8.)
- Four.      Raise the toes and make a partial turn to the right, trunk turned in that direction, so that the shoulders are square to the original rear, the arms retained bent.
- Class—  
Lunge.      Lunge straight in the direction in which the right foot is pointing, and strike the arms outwards right and left as above directed.

Four lunges in all will thus bring the class facing to the original front. After recovering from the fourth lunge, the arms are to be stretched to attention on the word “Four.”

Repeat the exercise, commencing to the left, the lunges being made with the left foot.

“Arms forwards bend” may be used as a commencing position to either practice.

To facilitate the performance of the various lunges and foot movements in the foregoing practices, they should be first taught without arm movements, the hands being placed on the hips and retained in that position until the command “Attention” is given.

When a class becomes proficient in executing the various movements of either practice by numbers, they should be practised judging the time, the command being “Right (Left)—Commence”; and the command “Steady” given on recovering from the front lunge. On the command “Attention,” drop the arms smartly to the sides. The command “Change” may be substituted for “Steady” if it is desired to repeat the lunges in the opposite direction.

*Shoulder movements with direct lunging* :—In these practices the shoulders are exercised chiefly when in the act of lunging, expansion of the chest being promoted. The trunk turning with the arms extended in the First Practice acts powerfully on the abdominal circulation; whilst the muscles of the arms and those surrounding the shoulders are exercised by retaining the arms in the extended positions. The above remarks also apply to the Second Practice, and in addition the chest muscles are more vigorously exercised, while a more powerful contraction of the shoulder muscles, and of the flexors and extensors of the arms is brought about.

The following music has been specially arranged with a view to its application to the First or Second Practices of “Shoulder movements with direct lunging,” but it may be used for other exercises either singly or in combination.

---

## Shoulder Movements with Direct Lunging.

*First or second practices.*

1 2 3 4 1 2 3 4

Gai - ly the trou - ba - dour touch'd his gui - tar,

1 2 3 4 1 2 3 (Change.) 4

When he was hast-en-ing home from the war,

1 2 3 4 1 2 3 4

Sing - ing, "From Pal - es - tine hi - ther I come;

1 2 3 4 1 2 3 4

La - dye love, la - dye love, wel - come me home!"



## GENERAL COMBINED PRACTICE.

---

Numerous combinations of exercises selected from the various groups may be practised, but the following will be sufficient to indicate how this may be accomplished, working from one group to another without either halting or returning to the commencing position :—

Class— As in “One,” “Arms raising and swinging,” Sixth  
Ready. Practice. (Fig. 16.)

Commence. Swing the arms freely to the rear, round to the front, and above the shoulders again as directed in the above mentioned practice. Repeat this twice, and on the fourth movement, instead of completing the swing, strike the palms of the hands together behind the back, and remain steady. (Fig. 17.)

Arms up— As directed in “Commencing positions.” (Fig. 7.)  
wards—  
Bend.

Right— As in “Direct lunging with arm movements,” First  
Lunge. Practice. (Fig. 43.)

Class— As directed in the last mentioned exercise.  
Recover.

Left— Repeat the lunge, substituting left for right.  
Lunge.

Class— As directed above.  
Recover.

Three Stretch the arms upwards as in “Arms stretching,”  
stretches First Practice, at the same time raising the heels as  
with heel high as possible ; after a slight pause lower the heels  
raising— and resume the “Arms upwards bend” position. Repeat  
Stretch. this twice, and after the third stretch remain with the heels raised and the arms stretched upwards.

Knees— Bend the knees slowly, forcing them well apart  
Bend. until the legs and thighs form a right angle at the knee-joint, still retaining the arms stretched upwards and trunk erect. (Plate 17.)

Astride— Keeping the arms stretched upwards, leap to the  
Leap. “Astride” as in “Commencing positions.” (Plate 9.)

Trunk and  
arms for-  
wards—  
Swing.

Bend the knees slightly, and the trunk forwards, at the same time swing the arms forwards and downwards smartly until the fingers point to the ground between the toes, and, without a pause, straighten the trunk and swing the arms forwards and upwards until they are vertically over the shoulders again, springing sufficiently off the ground with both feet as the arms ascend, to enable the heels to be closed smartly, thus resuming the "Ready" position.

Class—

Attention.

Bring the arms smartly to the "Upwards bend," and stretch them to the sides.

When these movements have been well practised by separate words of command, they may be combined by using the commands "Ready" and "Commence." The exercises will then be performed judging the time, and on their completion the class will remain steady with the arms stretched upwards. On the command "Attention" the arms are to be stretched to the sides.

*General combined practice* :—The object of general combined movements is to introduce, from the various groups, exercises which can be executed either to separate words of command or judging the time. A distinct rhythm and absolute precision of movement must be maintained throughout their performance, but it is not advisable to introduce dumb-bells or music with them, such combinations being adopted simply as a test of the general proficiency of a class of advanced pupils.

## EXERCISES SUITABLE FOR USE IN THE CLASS-ROOMS BETWEEN THE DESKS.

"Commencing positions" (omitting the movements of the lower limbs), "Head movements," "Arms sideways raising," "Arms sideways raising and forwards swinging," "Arms sideways and upwards raising," "Arms circling," "Arms bending and stretching," "Trunk movements," "Trunk and arm movements"—first, second and fourth practices, "Leg and hip movements"—first practice, "Leg, hip, and arm movements"—first and second practices, "Balance movements"—first practice, "Shoulder movements"—first, second, fifth, sixth, and seventh practices. •

FIG. 51.



FIG. 52.



FIG. 53.



FIG. 54.



FIG. 55.



FIG. 56.



FIG. 57.



FIG. 58.



FIG. 59.



## PART III.

### EXERCISES WHEN ON THE MARCH.



It is not advisable to practise any of the exercises for the upper or lower limbs with dumb-bells in the hands when on the march, free movements of the upper limbs being sufficient when the lower ones are being vigorously employed.

The class should be formed in single or double rank, at either half or full interval. (S. 17, Part I.), or they may remain in four ranks, as directed in S. 19, Part I.

If, previous to the marching, the class is in four ranks, with dumb-bells in the hands, proceed as follows :—

On the command “Ground bells—One,” bend the knees smartly, stoop forwards, and place the bells on the ground in line with the toes, the right bell crossed over the left one, and retain the hold lightly with the fingers and thumbs. On the command “Two,” release the bells, straighten the body, and come to attention. To “Take up bells,” proceed in two movements :—“One,” stoop and grasp the bells ; “Two,” come to attention.

The dumb-bells, being placed on the ground in four rows, form an excellent guide as regards direction in the marching, particularly where space is limited. By giving the command “Ranks one pace to the right (left)—March,” the class may be marched along, and wheeled around, the rows of bells in four independent ranks ; or one rank may step off on the command “March,” the others “Marking time” (S. 12, Part I.), until they can follow in single rank. The class may also be marched along, and around the lines in many other ways which will suggest themselves to the thoughtful teacher, the class ultimately marching to the previous formation.

## MARCHING WITH ARM MOVEMENTS.

---

Many of the arm, chest, and shoulder exercises can be combined with marching, whether the latter be in slow or quick time, as follows:—After the caution “Arms bending and stretching, First Practice,” give the command “Commence” as the right foot meets the ground. The class will continue to march, and will perform the first movement as the left foot makes its pace, completing the exercise in eight movements, and repeating it as often as desired. As the arms are being stretched downwards the command “Steady” may be given, on which the exercise will cease, but the march will be continued.

## MARCHING WITH LEG AND FOOT MOVEMENTS.

---

### MARCHING WITH HEELS RAISING.

CAUTION.—*In quick time.*

Right—  
Turn. As directed in S. 5, Part I.

Quick—  
March. On the word “March,” the class will step off together with the left foot as directed in S. 11, Part I.

Heels—  
Raise. Keeping the trunk erect, raise the heels, force the knees well back, and continue the march on the fore part of the feet, observing the same cadence and length of pace as directed in S. 9, Part I., the knees being kept as straight as possible throughout. (Fig. 56.)

Heels—  
Lower. The word “Lower” must be given as the left foot meets the ground. The right foot will complete its pace with the heel raised, and, by beating the left foot smartly as the next pace is taken, resume the ordinary march.

Class—Halt. As directed in S. 11, Part I.

### MARCHING WITH KNEES RAISING.

Quick—  
March. As directed in S. 11, Part I.



Knees— On the word “Raise,” given as the left foot meets  
 Raise. the ground, place the hands on the hips as the right foot makes its pace, and on the next and every subsequent one raise the thighs until they are horizontal, the toes pointed downwards, and the same length of pace taken as in the ordinary quick march.

Knees— On the word “Lower,” given as the left foot meets  
 Lower. the ground, resume the ordinary quick march on the right foot, beat the left smartly on the ground on making the next pace, and drop the hands to the sides.

This exercise can also be practised when “Marking time,” the words of command being given as above. The class can afterwards be halted, or marched, as directed in S. 12, Part I.

#### ALTERNATE STEP AND HOP MARCH.

##### FIRST METHOD.

Hands on— As in “Commencing positions.”  
 Hips.

Two hops— On the word “March,” step forwards on the left  
 March. foot and hop to the front on the fore part of it a distance of about a foot's length, at the same time swing the right leg straight to the front, the knee straight and toe pointed, as in “One,” Second Practice, “Balance movements,” the trunk erect and square to the front. (Fig. 57.) On the completion of the hop bring the right foot to the ground a full pace forwards and hop on the fore part of it as above directed, swinging the left leg straight to the front during the hop. When the hop is completed take a full pace forwards on the left foot, and come to attention by closing the heels and dropping the hands smartly to the sides. Thus three full paces will be taken in making the two hops.

When the above can be performed correctly four hops should be practised, necessitating five steps being taken. When four or any even number of hops can be correctly executed, proceed as follows:—

Quick— As directed in S. 11, Part I.  
 March.

Two hops, commencing on the left foot—Hop. On the word “Hop,” which should be given as the left foot meets the ground, place the hands on the hips as the right foot makes its pace, and, by starting on the left foot complete two hops as above directed; after taking the third pace, come to attention.

When this can be performed correctly, four hops should be practised, necessitating five steps being taken. When four or any even number of hops can be correctly executed, proceed as follows:—

Quick—March. As directed in S. 11, Part I.

On the left and right foot alternately—Hop. On the word “Hop,” which must be given as the left foot meets the ground, commence and continue the hopping as above directed, the cadence being that of the “Quick march.” (S. 11, Part I.)

Into quick time—Quick. On the word “Quick,” which must be given as the right foot meets the ground, complete the hop on that foot, and resume the “Quick march” on the left foot, beating it smartly, dropping the hands to the sides.

Class—Halt. As directed in S. 11, Part I.

## SECOND METHOD.

Hands on—Hips. As in “Commencing positions.”

Two hops—March. On the word “March” step forwards on the left foot and hop on the fore part of it as directed in First Method, keeping the right leg well stretched to the rear and the toe pointed as in “Two,” Second Practice, “Balance movements,” the trunk erect and square to the front. (Fig. 58.) On the completion of the hop, carry the right foot a full pace forwards and hop on the fore part of it as above directed, keeping the left leg well stretched to the rear and the toe pointed. When this hop is completed, take a full pace forwards on the left foot, and come to attention by closing the heels and dropping the hands smartly to the sides. Thus three full paces will be taken in making the two hops.

All the subsequent hopping movements of this method, *e.g.*, four hops, any number of hops, either from the halt or on the march, are a repetition of those of the First Method, the only exception being that the leg, which in the latter is carried to the front, will in the Second Method be carried to the rear.

### WITH KNEES RAISING.

CAUTION.—*In double time.*

Quick— As directed in S. 11, Part I.  
March.

Into double As directed in S. 15, Part I.  
time—  
Double.

Knees— Without throwing the feet to the front more than  
Raise. usual, lift the knees at each step as directed in “Knee raising,” “Leg and foot movements in quick time,” observing the same cadence and length of pace. (Fig. 59.)

Knees— On the word “Lower,” given as the left foot meets  
Lower. the ground, resume the ordinary double march.

Into quick As directed in S. 15, Part I.  
time—Quick.

Class—Halt. As directed in S. 11, Part I.

*Leg and foot movements on the march.*—“Heels raising” is an excellent exercise for the legs, especially below the knee-joints. It also affects the muscles behind the thighs and buttocks. “Hopping” is a valuable exercise, acting in a most powerful manner on the ankle-joints, calves, and knee-joints; in fact all joints and muscles below the waist are actively employed, and even in the latter the muscles are greatly exerted in maintaining the balance. “Knees raising,” either in quick or double time, is highly beneficial in developing the abdominal muscles, especially if the head be kept erect or thrown slightly back. The weight of the body will then be on the spinal column, the respiration will be free, the stooping habit will be counteracted, and the chest relieved of the pressure of the shoulders.

### MARCHING AND EXERCISES ALTERNATED.

This is capable of great variation, in fact the whole of the exercises described in this book can be made to alternate with marching as follows:—The command “With arms raising and swinging, Fifth Practice, quick—March,” being given, the class will take seven paces forwards, and halt by bringing the right heel to the left—thus making eight movements. The exercise will then be performed in eight movements, after which seven more paces will be taken, and the exercise repeated, and so on. On the command “Steady” the exercise will cease, but the march will be continued.

When on the march, the same cautionary words should be used, and the command “Commence”—given as the right foot meets the ground—substituted for “Quick march.” Seven paces forwards will be taken as above before the exercise is commenced. Marking time may be substituted for the intermediate marching mentioned above; or exercises which can accompany the marking time may be performed; or the hands may be placed on the hips during the marking time, and dropped to the sides on the eighth movement.

It will aid considerably in the accomplishment of such exercises as the above if the pupils are allowed to count audibly; and if, *when in the open air*, the hands are allowed to strike the outer sides of the thighs smartly on the completion of each exercise.

---

## PART IV.

# MARCHING IN VARIOUS FORMATIONS AND FIGURE MARCHING.



The ground should be marked out as shown in diagrams. (Figs. 60-65). If these dimensions exceed the space available, the teachers must use their own judgment in advantageously utilising the ground at their disposal.

The class to be formed in two ranks at half interval, properly sized and numbered (S. 17, Part I.), and facing CDE.

Right—            As directed in S. 5, Part I.  
Turn.

Quick—            As directed in S. 11, Part I.  
March.

Twos-Out-        At B the first file will wheel to the left, the second  
wards.            to the right, and so on.

Inwards—        The right files (or ones) will wheel to the left at C,  
Wheel.            the left files (or twos) to the right at J. This com-  
mand will be repeated when the leading files reach  
E and G.

Advance by        Each file will again wheel inwards at F, and  
—Fours.           advance in fours. (Fig. 60).

Fours—           Wheel outwards in fours at B, first to the left,  
Outwards.        second to the right.

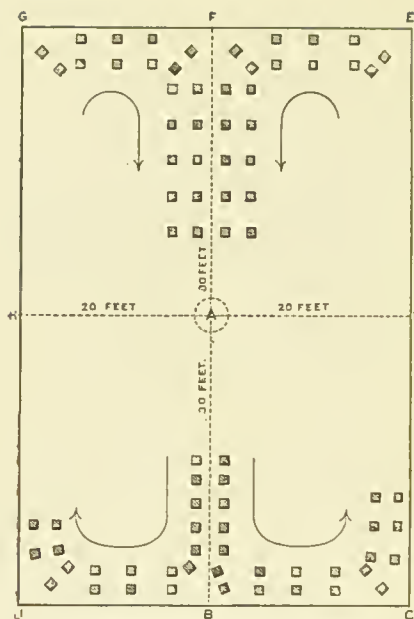
Inwards—        Wheel inwards twice at the same angles as when in  
Wheel.            file.

Advance by        Wheel inwards by fours at F, and advance in  
—Eights.           eights. (Fig. 61).

When in this formation a series of wheeling may be practised as follows :—

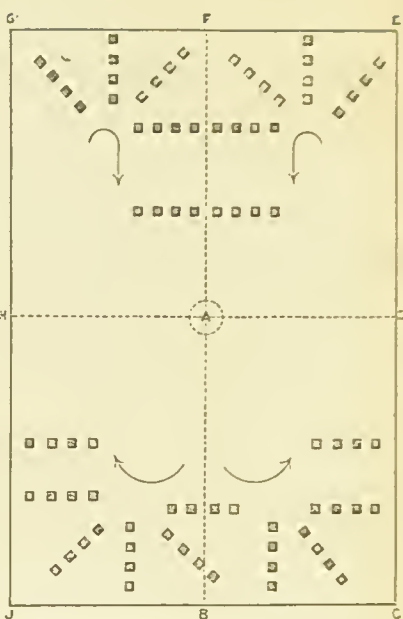


FIG. 60.



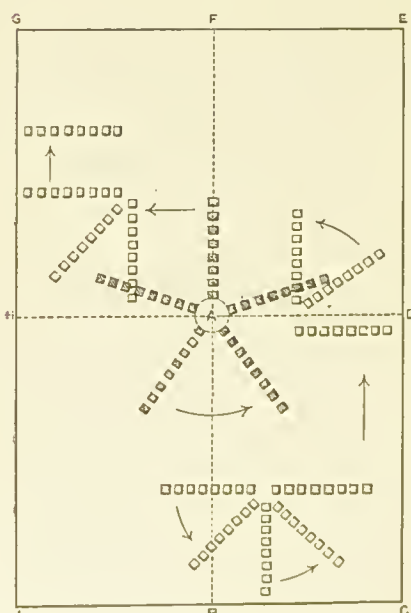
TWOS OUTWARDS, ADVANCE BY FOURS.

FIG. 61.



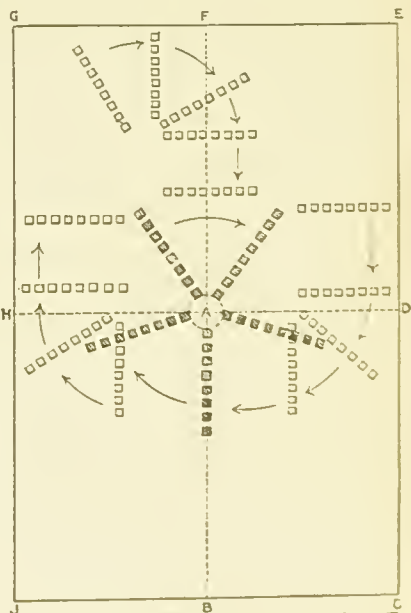
FOURS OUTWARDS, ADVANCE BY EIGHTS.

FIG. 62.



EIGHTS LEFT WHEEL, FORM STAR TO THE LEFT.

FIG. 63.



EIGHTS RIGHT WHEEL, FORM STAR TO THE RIGHT, ADVANCE BY EIGHTS.

By eights,  
left—  
Wheel.

At B the whole will wheel in succession to the left.

CAUTION.—*Form star to the left.*

Left—  
Wheel.

To be given when the leading section arrives on the line DA; when square they will advance on A; the first section, followed by the remainder, will wheel round a circle about five feet in diameter; the outer pupils will take a full pace, feeling their left and looking inwards; the others will regulate their length of pace according to their distance from the wheeling flank, looking outwards; those on the pivots will take a pace of about six inches. (Fig. 62).

About—  
Turn.

The whole will turn about, and wheel to the right.

Front—  
Turn.

The whole will again turn about, and wheel as before.

Class—  
Forward.

This command must be given when the first section is facing the base GH. The class is then to be wheeled to the right, and also at the angles G and E.

CAUTION.—*Form star to the right.*

Right—  
Wheel.

To be given when the leading section arrives at DA; and the wheel to be repeated to the right. (Fig. 63).

Class—  
Forward.

This command must be given when at AB; the class to be wheeled to the right, and also at the angles G and F, which will bring them advancing in eights as before.

When in the "Star" formation, the command "Inner fours, about—Turn" may be given; the inner fours will then turn about and reverse their wheel; the outer fours describing a circle round them, moving in the opposite direction. The command "Inner fours, front—Turn," must be given when the wheeling flanks of the inner fours are three paces from their former companions; or both fours may be ordered to turn about, in which case the wheeling will be reversed.

**Fours Outwards.** When at B each section of eights will divide in the centre, and wheel outwards by fours.

**Inwards—Wheel.** As above.

**Advance—by Fours.** Each section of fours will wheel inwards alternately at F, the whole advancing by fours. (Fig. 64.)

**Twos—Outwards.** When at B, wheel outwards in file.

FIG. 64.

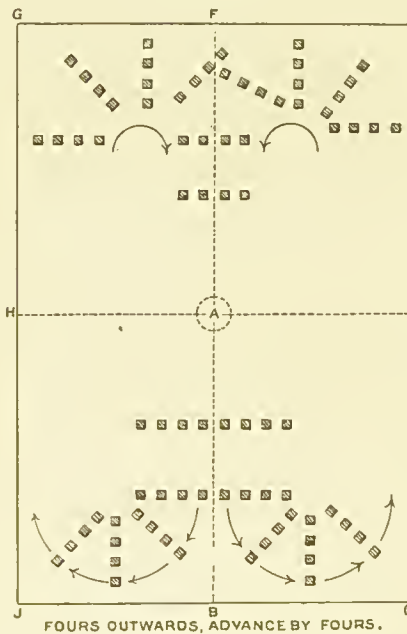
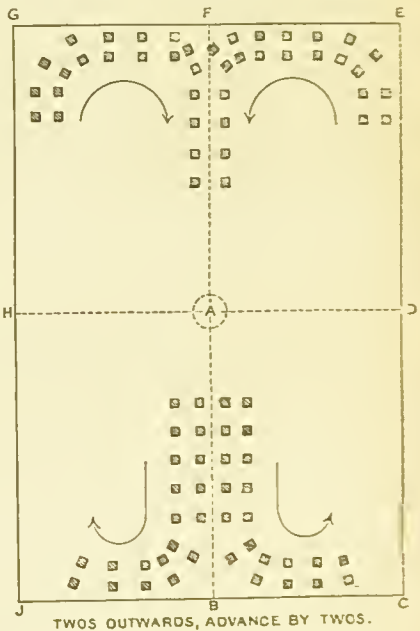


FIG. 65.



**Inwards—wheel.** As before.

**Advance by —Twos.** Each file will wheel inwards alternately, and advance as in first formation. (Fig. 65.)

Repeat the above in double time.

The whole of the leg and foot movements, both in quick and double time, may be practised during these formations.

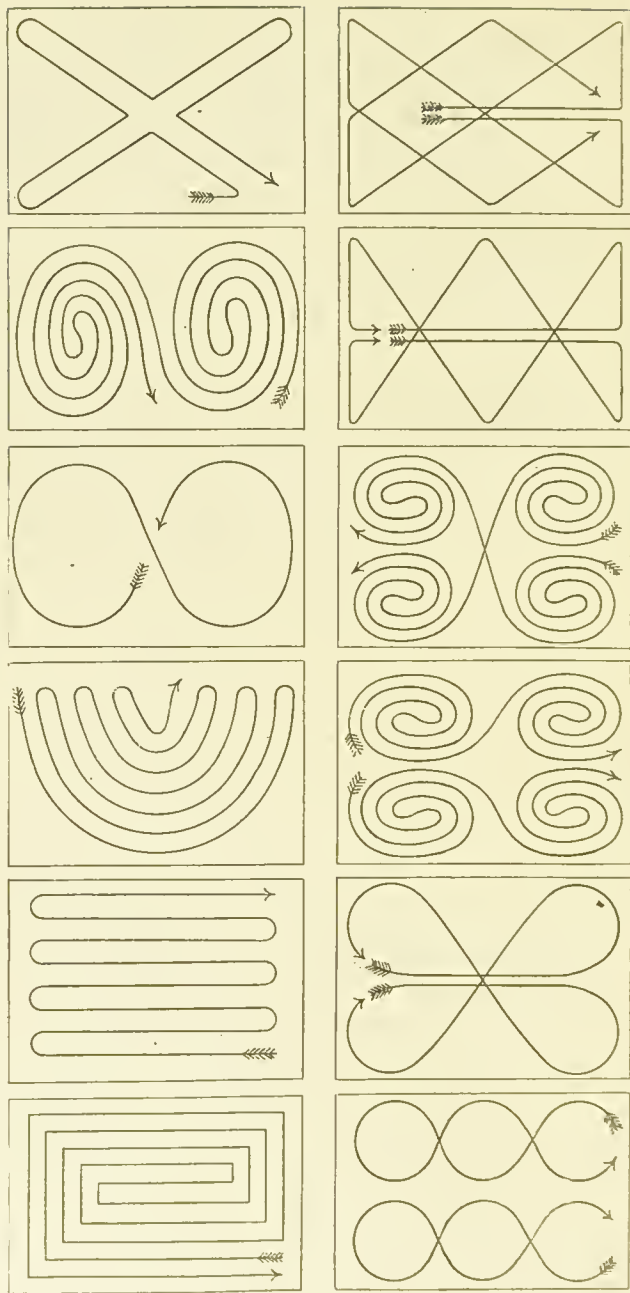
FIGURE MARCHING.—Many varieties of figure marching may be executed when in single rank or in file ; as, marching in parallel and horizontal lines, forming crescents, circles, crosses, figures of eight, &c. As these merely require one or two intelligent leaders for their correct execution, it has not been considered necessary to describe them here, though a few examples, in single and double rank, are shown in diagrams. (Plate 29).

*Marching in various formations:*—Practised chiefly to use the space available to the best advantage when performing the “Leg and foot movements on the march.” It necessitates the pupils passing a given point in single rank, twos, or fours, thus enabling the teacher to see each individual under the various circumstances. This will give every facility for correcting any inaccuracies in position, &c., that may be observed. This marching varies the lesson when introduced between the practices ; and, if used preparatory to the exercises, will promote an active circulation, while in cold weather it will afford a healthy recreation combined with discipline.



Plate 29.

FIGURE MARCHING.



No real physical benefit can be derived from Figure Marching, as it is employed for effect, to afford variety and amusement to children, and for display purposes; therefore, to be effective, such marching should be performed with the use of as few words of command as possible. In the teaching of Figure Marching, it will be of great assistance if the floor or playground be marked in such a way as to indicate the principal wheeling points. By this means the children, particularly the leaders, will gain confidence, and will more readily be enabled to form figures correctly than would be the case when no such aid is afforded.



PART V.

SWIMMING DRILL.

(PLATE 30).

---

ARM MOVEMENTS.

---

COMMENCING POSITION.—“*Attention.*”

Both arms —Ready. With the hands and arms fully extended raise them to the front until they are horizontal, backs of the hands upwards, thumbs close to the fore-fingers and touching each other, head thrown slightly backwards, and eyes directed over the backs of the hands. (Fig. 66).

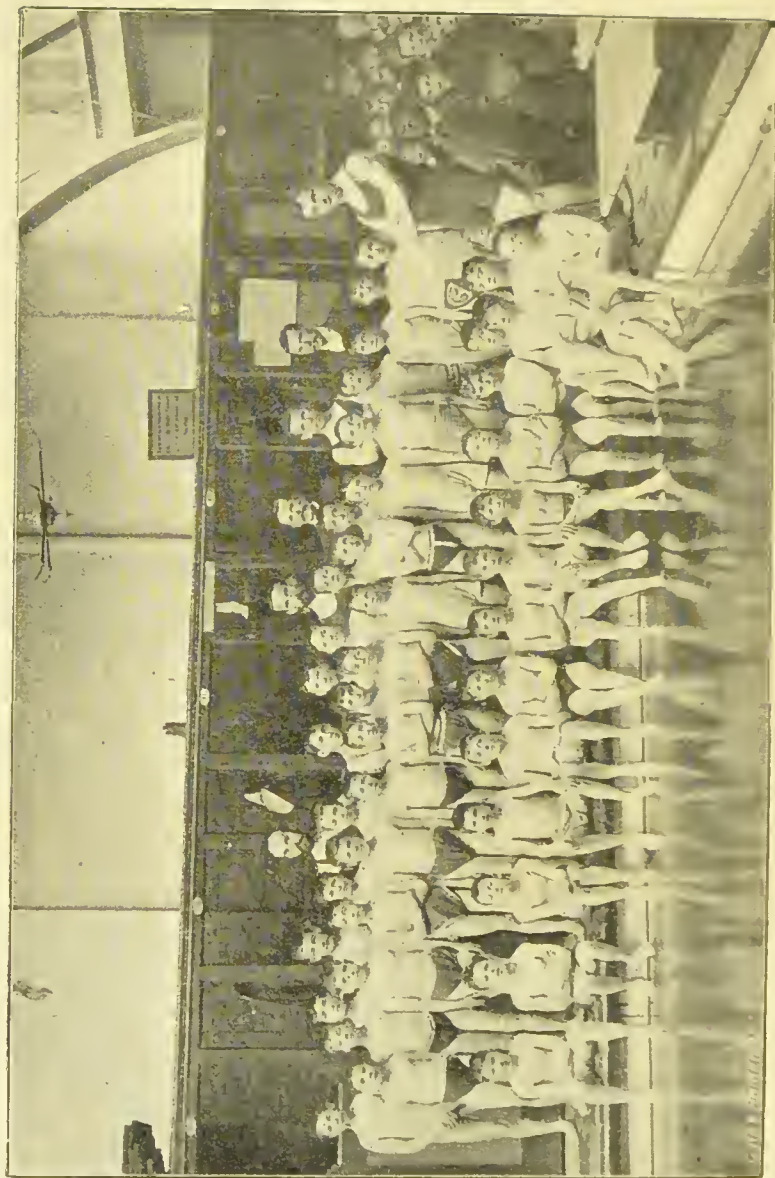
One. Separate the hands, and force the arms backwards by a circular movement until they are extended right and left, the hands being about six inches in front of the horizontal line of the shoulders. During the movement the arms should remain straight, but be rotated inwards so that the palms are gradually turned outwards, the hands being slightly hollowed. (Fig. 67).

Two. Bring the upper arms smartly to the sides, the fore-arms and hands slanting forwards and upwards, thumbs close to the fore-fingers, the points of the latter being about six inches apart, and about the same distance in advance of the chin, the wrists touching the outer edges of the breasts. (Fig. 68).

Three. Thrust the hands forwards by extending the arms, thus resuming the “Ready” position.

Class—Attention. Keeping the arms straight, swing them smartly downwards to the sides.

PLATE 30.



GROUP OF SWIMMERS, HEAD MASTER AND STAFF,

SOUTHWARK PARK BOARD SCHOOL, LONDON, S.E.

When these movements have been learned separately by numbers, they should be practised judging the time, as follows :—

Class— As directed above.

Ready.

Class— Commence, and continue the movements as often  
Commence. as required ; the command “Steady” being given as the arms are approaching the “Ready” position.

Class— As directed above.  
Attention.

The pupils should first be permitted to count the time audibly during the movements, and when proficient to judge the time.

FIG. 66.



FIG. 67.



FIG. 68.



### LEG MOVEMENTS.

COMMENCING POSITION.—“*Hands on—Hips.*”

Right leg— Keeping the shoulders square, raise the right knee  
One. outwards to the right front, bending the fore-leg on the thigh so that the right heel touches the inner side of the left leg just above the knee, the toes pointing downwards. (Fig. 69.)

Two. Forcibly extend the leg outwards and downwards by a backward circular movement, until the foot rests

upon the ground, with the heel raised, about eighteen inches to the right of the left foot. The toe should be raised as the leg is being extended outwards, and depressed as the foot approaches the ground. The weight of the body is to remain on the left leg throughout. (Fig. 70.)

Three. Keeping both knees rigid, bring the right heel smartly to the left.

Class— Drop the hands smartly to the sides.  
Attention.

FIG. 69.



Repeat the above movements with the left leg.

When these movements have been learned separately by numbers, they should be practised judging the time, as follows :—

Right leg— Commence, and continue the movements as often as  
Commence. required ; the command “Steady” being given as the right heel is approaching the left.

Repeat the above movements with the left leg.

Class— Drop the hands smartly to the sides.  
Attention.

If the drill is being taught in class, the leg movements can be easily acquired by "Assistance" as directed in "Balance movements," Part II.

## COMBINED ARM AND LEG MOVEMENTS.

---

### COMMENCING POSITION.—"Attention."

Class— Raise the arms to the front as directed in "Ready,"  
Ready. "Arm movements."

With right Separate the hands, and force the arms backwards  
leg—One. as directed in "One," "Arm movements," at the same  
time raise the right knee outwards to the right front  
as directed in "One," "Leg movements." (Fig. 71).

Two. Bring the upper arms smartly to the sides as  
directed in "Two," "Arm movements"; at the same  
time forcibly extend the leg outwards and downwards  
by a backward circular movement as directed in "Two,"  
"Leg movements." (Fig. 72).

Three. Thrust the hands forwards by extending the arms,  
as in "Three," "Arm movements"; at the same time  
bring the right heel smartly to the left as directed in  
"Three," "Leg movements." (Fig. 66).

Repeat the above movements with the left leg.

Class— Swing the arms smartly downwards to the sides.  
Attention.

When these movements have been learned separately by numbers, the pupils should practise them counting the time audibly, as follows :—

Class— As directed above.  
Ready.

With right Perform the three movements with both arms and  
leg—Com- right leg simultaneously, halting on the "Third."  
mence.

Repeat the above movements with the left leg.

N.B.—When so practised, the placing of the toe on the ground in the second movement is not necessary, and should be omitted, i.e., the right leg after being fully extended should be brought



directly to the left, both legs being kept rigid as in "Three." As the arms are performing their sweeping movement outwards, the heel is raised above the knee. During the stretching and forcible closing of the leg, the arms are thrust forwards.

It cannot be too forcibly impressed on the learners that the power of the arm stroke, "One," is of secondary importance when compared with that of the legs when closing them on "Three."

#### AS A COMBINATION—JUDGING THE TIME.

Class— As directed above.  
Ready.

FIG. 70.



FIG. 71.



FIG. 72.



With right  
leg—Com-  
mence.

Commence, and continue the movements as often as required, the command "Steady" being given as the right heel is approaching the left.

Repeat the above movements with the left leg.

Class—  
Attention.

Drop the hands smartly to the sides.

The pupils should be taught to breathe freely during the foregoing movements, inhalation, through the nose, taking place as the arms are performing the second movement, and exhalation, through the mouth (with the lips partially closed), as they are performing the third movement.

When performing the movements, judging the time, the rate should not exceed twenty strokes per minute.

The above movements, which are preliminary to swimming on the breast, are quite sufficient to teach to children before entering the water. There is no necessity to continue their practice after a child can perform them correctly, as they are of no further use. They cannot be considered as physical exercises for strengthening the limbs, as no material resistance to effort is experienced. Therefore, when the drill is taught in class, each child, on correctly acquiring the various movements, should be excused further practice on land, and encouraged to immediately put into practice in the water what has been learnt on land.

---

# PART VI.

## DESK AND SLATE DRILL.

### DESK DRILL.

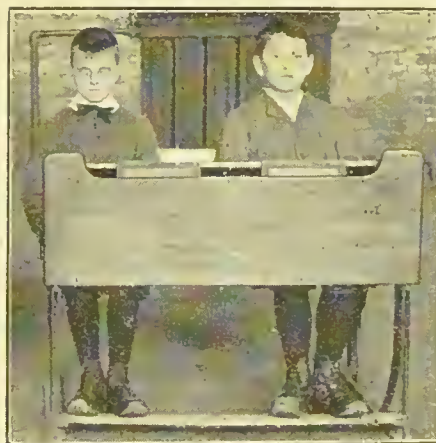
COMMENCING POSITION.—“*Pupils seated.*” (Fig. 73.)

*To raise the flaps.*

Desks up—      Seize the flap of the desk smartly, fingers above,  
One.                    thumbs below. (Fig. 74.)  
Two.                    Raise the flap, still retaining the hold. (Fig. 75.)

FIG. 73.

FIG. 74.



Three.                    Release the hold of the flap, and assume the commencing position.

Class—                    Remove the feet from the rests, place them quietly  
Stand.                    on the floor, and spring to attention. (Fig. 76 )

Step out—                    Step outwards, those on the right moving diagonally  
wards—                    to the front, the remainder moving slightly to the  
March.                    left rear. (Fig. 77.)

Step                    Step inwards, thus resuming the position of atten-  
inwards—                    tion between the desks. (Fig. 76.)  
March.

Class—Sit.                    Sit, and resume the commencing position.

*To lower the flaps.*

Desks down    Seize the flap as in "Two" when raising it. (Fig. 75.)  
 —One.

FIG. 75.



FIG. 76.



Two.            Lower the flap, still retaining the hold, thus  
 assuming position "One" when raising it. (Fig. 74.)

FIG. 77.



Three.            Release the hold of the flap, and assume the com-  
 mencing position. (Fig. 73.)

## SLATE DRILL.

COMMENCING POSITION.—“*Pupils seated.*” (Fig. 78.)

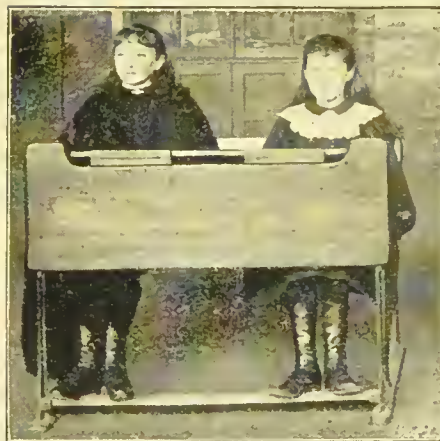
*To take slates out.*

Slates out— One. Seize the upper corners of the slates between the points of the fingers and thumbs. (Fig. 79.)

Two. Raise the slates until the lower corners are nearly level with the edge of the slot. (Fig. 80.)

FIG. 78.

FIG. 79.



Three. Place the slates on the desks, by bringing the hands towards the chest, retaining the hold. (Fig. 81.)

Four. Release the hold of the slates, and assume the commencing position. (Fig. 78.)

*To put slates in.*

Slates in— One. Seize the corners of the slates nearest to the body, and assume the position “Three” in taking slates out. (Fig. 81.)



- Two. Lift the slates, and place them about two inches in the slot. (Fig. 80.)
- Three. Lower the slates, retaining the hold. (Fig. 79.)
- Four. Release the hold of the slate, and assume the commencing position. (Fig. 78.)

The object of retaining the hold of the flaps, when raising or lowering them, is to prevent the children making unnecessary noise, or spilling the contents of the inkwells.

The above "Desk and slate drill" is suitable for use where there

FIG. 80.

FIG. 81.



are dual desks with flaps. In schools where desks of other patterns exist the teachers should arrange the drill to suit the circumstances, bearing in mind that words of command will simplify the movements more than a long succession of numbers.

When leaving the class-rooms those children in the row furthest from the door should, as a rule, be the first to leave, followed by the next in order. Those waiting between the rows of desks must not be ordered to mark time, but the leaders should be instructed to follow in succession without causing an interval.

When marching into class-rooms, the children should proceed direct to their respective places and stand at attention.

# GRADUATED TABLE OF DRILL AND PHYSICAL EXERCISES SUITABLE FOR EACH STANDARD IN AN ELEMENTARY SCHOOL.

## DRILL.

Standard I.	Standard II.	Standard III.	Standard IV.	Standard V.	Standard VI. & VII.
Formation of a class in one or two ranks	Same as Standard I., <i>plus</i>	Same as Standard II., <i>plus</i>	Same as Standard III., <i>plus</i>		
Attention	Balance step	Opening and closing ranks, any method	Sizing and forming company		
Dressing with or without intervals.	Marking time	Balance step ad- vancing and re- tiring			
Opening and closing ranks (1st method)	Side or closing step	Changing step	Opening and closing ranks, judging the time	All	All
Standing at ease	Turning on the march	Double march			
Turnings	Marching in file in quick time	Marching in file in double time.			
Marching in open formation in slow and quick time.	Wheeling in file				

# PHYSICAL EXERCISES.

Standard I.	Standard II.	Standard III.	Standard IV.	Standard V.	Standard VI. & VII.
Commencing positions Head movements Arms raising and swinging, 1st and 2nd practices Arms bending and stretching, 1st practice Trunk movements 1st, 2nd and 3rd practices Leg and hip movements, 1st practice	Same as Standard I., <i>plus</i> Arms raising and swinging, 3rd and 4th practices Arms bending and stretching, 2nd and 3rd practices Trunk and arm movements, 1st, 2nd, 3rd, and 4th practices Shoulder movements 1st, 2nd and 5th practices Marching with heels raising	Same as Standard II., <i>plus</i> Arms raising and swinging, 5th and 6th practices Leg and hip movements, 2nd practice Leg, hip and arm movements, 1st and 2nd practices Lunging, 1st practice Balance movements 1st and 2nd practices Marching in quick time with knees raising	Same as Standard III., <i>plus</i> Leg and hip movements, 3rd practice Leg, hip and arm movements, 3rd and 4th practices Side lunging with arm movements, 1st and 2nd practices Side lunging with arm movements, 1st and 2nd practices Balance movements, 3rd and 4th practices Shoulder movements 3rd and 4th practices Step and hop march, 1st method Marching in various formations in quick time	Same as Standard IV., <i>plus</i> Side lunging with arm movements, 3rd practice Direct lunging with trunk and arm movements, 1st and 2nd practices Shoulder movements 5th and 7th practices Combinations of any of the foregoing Step and hop march, 2nd method Marching in double time with knees raising Marching with exercises combined	Same as Standard V., <i>plus</i> Side lunging with arm movements, 4th practice Marching and exercises alternated Shoulder movements 8th practice Shoulder movements with direct lunging, 1st and 2nd practices Combinations of any of the foregoing Marching in various formations in double time

It should be clearly understood that the above is not intended as tables of exercises restricted to each standard, but to form a guide in enabling teachers to select movements suitable for their classes, at the same time indicating a point beyond which, under ordinary circumstances, they should not advance. This plan ensures that the exercises shall be as varied as possible, and, consequently, more interesting to the children as they pass into higher classes, till eventually the elder scholars can perform the whole of the elementary, intermediate, and advanced exercises at the discretion of the teacher.



New Edition.—Entirely re-written and enlarged. Recommended by the British College of Physical Education.

---

THE THEORY  
OF  
PHYSICAL EDUCATION  
IN  
*ELEMENTARY SCHOOLS.*

---

BY  
THOMAS CHESTERTON,  
*Organizing Teacher of Physical Education to the School Board for London.*  
LATE CHIEF INSTRUCTOR AT THE ALDERSHOT GYMNASIUM.  
*Author of Manual of Drill & Physical Exercises, &c., &c*  
Holder of First-Class (Advanced) Certificates for Physiology and Hygiene from  
the Science Department, South Kensington.  
*Founder of the British College of Physical Education.*

---

WITH A PREFACE BY  
COLONEL G. M. ONSLOW,  
*Late Inspector of Military Gymnasias in Great Britain.*  
Examiner in Physical Education to the School Board for London.

---

ILLUSTRATED.  
REVISED EDITION.

---

TO BE OBTAINED FROM GALE & POLDEN, LTD., 2, ALEX CORNER, LONDON, E.C.  
PRICE 3- NETT.

---

This work has been adopted by the London School Board for use in their Schools  
and is placed on the Board's Requisition List.









